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CHARACTERIZATION OF THE ENERGY DEPOSITION PRODUCED BY THE PRIMARY ELECTRON BEAM ON THE EXCEDE III PROGRAM APPENDIX B & C

R.J. Rieder
R.L. McNutt, Jr.
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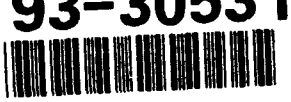

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This technical report has been reviewed and is approved for publication

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The primary goal of the EXCEDE III (Excitation by Electron Deposition) atmospheric energy deposition experiment was to monitor the spatial distribution of the energy deposition profile produced by the ~18 Ampere ~2.5 keV electron beam. During the rocket flight on April 27, 1990, prompt emission at 3914 Å from the N_2^+ (1N) 0-0 transition were measured by a UV scanning photometer. We have inverted the intensity profiles to obtain profiles of energy deposition by the beam.

14. SUBJECT TERMS
EXCEDE III, N^+_2 (IN), 3914 Å, Electron Beam, Atmospheric Deposition, Artificial Aurora, Scanning Photometer

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Appendix B: Table of 3914 Å Scanning Photometer Fit Parameters

Accesion For	
NTIS CRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution /	
Availability Codes	
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SCAN #	TIME (s)	ALT. (km)	SINθ	λ_c (NR-m)	λ_t (NR-m)	y_o (m)	δy_o (m)	σ (m)	$\delta\sigma$ (m)	p	δp	γ_o (deg)	$\delta\gamma_o$ (deg)	σ (deg
1	134.9	97.90	.69	80.20149	1.93047	5.24492	.00362	1.37000	.01010	22.00000	1.08000	3.20900	.00221	.840
2	136.0	98.53	.69	130.85510	3.05186	5.56746	.01080	2.36000	.02040	1.83000	.03190	3.25900	.01100	1.380
3	136.8	98.99	.69	198.86220	4.56113	5.72051	.01480	2.11000	.01560	1.40000	.02010	3.21900	.00831	1.190
4	138.0	99.61	.69	146.33250	3.40889	5.89335	.01720	2.08000	.01960	1.21000	.01990	3.18900	.00930	1.120
5	138.8	100.04	.69	170.25230	3.94417	4.73625	.01870	2.41000	.01970	1.52000	.02470	2.46900	.00974	1.260
6	139.8	100.61	.69	-	-	-	-	-	-	-	-	-	-	-
7	140.8	101.10	.69	-	-	-	-	-	-	-	-	-	-	-
8	141.9	101.66	.69	137.89030	3.24476	2.67537	.02530	2.82000	.02710	1.40000	.02620	1.25900	.01190	1.320
9	142.6	102.03	.69	115.84660	2.76569	2.36831	.02760	2.74000	.02870	1.46000	.02910	1.07900	.01250	1.250
10	143.9	102.63	.69	101.77620	2.46148	2.34029	.02970	2.74000	.03250	1.39000	.03150	1.02900	.01310	1.210
11	144.6	102.97	.69	94.03741	2.30046	1.97305	.03140	2.73000	.03400	1.50000	.03770	.84100	.01340	1.170
12	145.8	103.56	.69	91.69234	2.25001	1.02614	.03170	2.69000	.03390	1.41000	.03390	.42500	.01310	1.110
13	146.7	103.94	.70	-	-	-	-	-	-	-	-	-	-	-
14	147.6	104.39	.70	-	-	-	-	-	-	-	-	-	-	-
15	148.6	104.82	.70	-	-	-	-	-	-	-	-	-	-	-
16	149.7	105.31	.70	71.99374	1.84079	-.81435	.03470	2.47000	.03790	1.38000	.03990	-.30200	.01290	.917
17	150.4	105.59	.70	67.06908	1.73228	-.86355	.03610	2.45000	.03890	1.30000	.04040	-.31200	.01300	.884
18	151.7	106.12	.70	52.06062	1.40498	-.46597	.03680	2.20000	.04070	1.29000	.04420	-.16400	.01300	.774
19	152.4	106.40	.70	50.65357	1.37848	-.40448	.04000	2.28000	.04320	1.28000	.04730	-.13920	.01380	.786
20	153.5	106.85	.70	-	-	-	-	-	-	-	-	-	-	-
21	154.5	107.22	.70	-	-	-	-	-	-	-	-	-	-	-
22	155.5	107.60	.70	-	-	-	-	-	-	-	-	-	-	-
23	156.3	107.91	.70	54.40569	1.53675	.56104	.04220	2.28000	.04770	1.28000	.05010	.17600	.01320	.715
24	157.5	108.36	.70	46.90145	1.32286	1.09950	.04590	2.36000	.04800	1.33000	.05220	.33600	.01410	.723
25	158.2	108.60	.70	46.66695	1.34270	.93421	.04690	2.30000	.05100	1.28000	.05450	.28100	.01410	.690
26	159.5	109.03	.70	39.86624	1.16811	1.10703	.04660	2.20000	.05040	1.24000	.05660	.32600	.01370	.647
27	160.2	109.26	.70	41.27328	1.21460	.81935	.04900	2.31000	.05050	1.34000	.06090	.23600	.01410	.664
28	161.3	109.63	.70	-	-	-	-	-	-	-	-	-	-	-
29	162.3	109.93	.70	-	-	-	-	-	-	-	-	-	-	-
30	163.4	110.27	.70	42.91483	1.27437	.89020	.04730	2.24000	.05790	1.18000	.05690	.24400	.01280	.608
31	164.1	110.48	.70	37.99018	1.15510	.56685	.05400	2.27000	.05730	1.27000	.06310	.15100	.01440	.605
32	165.3	110.84	.70	34.94158	1.62602	.41835	.08610	2.02000	.07180	1.46000	.08880	.10900	.02250	.528
33	166.0	111.03	.70	36.58313	1.14786	.57773	.05270	2.14000	.05660	1.20000	.06580	.14800	.01350	.549
34	167.3	111.37	.70	29.31341	2.47738	.34170	.08640	2.11000	.07830	2.33000	.25100	.08600	.02180	.532
35	168.1	111.58	.70	-	-	-	-	-	-	-	-	-	-	-
36	169.1	111.83	.70	-	-	-	-	-	-	-	-	-	-	-
37	170.1	112.06	.70	-	-	-	-	-	-	-	-	-	-	-
38	171.2	112.32	.70	25.32679	1.94132	1.11992	.07800	1.97000	.09130	1.80000	.19000	.26300	.01830	.463
39	171.9	112.47	.70	24.15425	1.60541	1.04292	.07880	1.90000	.08200	1.95000	.22100	.24100	.01820	.439
40	173.1	112.74	.70	28.84439	1.32294	2.28599	.09080	2.10000	.07460	1.45000	.10200	.52000	.02070	.477
41	173.8	112.88	.70	26.96834	1.31828	2.51892	.08290	2.02000	.08500	1.34000	.09400	.56400	.01860	.454
42	175.0	113.10	.70	-	-	-	-	-	-	-	-	-	-	-
43	175.9	113.28	.71	-	-	-	-	-	-	-	-	-	-	-
44	176.9	113.45	.71	-	-	-	-	-	-	-	-	-	-	-
45	177.7	113.59	.70	28.14087	1.09860	3.10109	.07210	2.02000	.07750	1.46000	.12100	.65400	.01520	.426
46	179.0	113.79	.70	25.79580	2.19006	3.10330	.10700	2.15000	.12500	1.56000	.14100	.64400	.02210	.446
47	179.7	113.89	.70	29.31341	1.11334	2.76636	.06520	2.02000	.07810	1.20000	.09120	.56600	.01330	.413
48	180.9	114.06	.70	27.67186	1.07729	2.70968	.08480	2.38000	.09030	1.42000	.10700	.54700	.01710	.481
49	181.6	114.16	.70	24.15425	1.05978	2.09207	.09750	2.12000	.08680	1.69000	.14900	.41600	.01940	.422
50	182.8	114.29	.70	-	-	-	-	-	-	-	-	-	-	-
51	183.7	114.40	.70	-	-	-	-	-	-	-	-	-	-	-
52	184.8	114.51	.70	24.15425	1.17525	1.46108	.08130	2.19000	.08000	1.85000	.18700	.27900	.01550	.417
53	185.5	114.58	.70	24.15425	1.03553	1.46277	.08690	2.13000	.08600	1.74000	.16800	.27500	.01640	.400
54	186.8	114.68	.70	21.55122	1.09311	1.46719	.11200	2.12000	.09850	1.62000	.16000	.27300	.02080	.394
55	187.5	114.73	.70	25.32679	1.03118	.21255	.09270	2.30000	.09500	1.45000	.12700	.03900	.01700	.421
56	188.8	114.82	.70	12.59304	.90413	-.95468	.08710	1.68000	.08830	2.44000	.41500	-.17290	.01580	.304
57	189.6	114.86	.71	-	-	-	-	-	-	-	-	-	-	-
58	190.6	114.91	.71	-	-	-	-	-	-	-	-	-	-	-
59	191.5	114.94	.71	-	-	-	-	-	-	-	-	-	-	-
60	192.7	114.97	.70	23.68524	.95249	-2.25566	.08970	2.42000	.09000	1.64000	.14800	-.38900	.01540	.417
61	193.3	114.99	.70	21.36361	1.39481	-2.61308	.12200	2.22000	.11000	1.58000	.15500	-.44500	.02080	.378
62	194.6	115.00	.70	22.37199	.98534	-1.58752	.09320	2.28000	.10400	1.35000	.14300	-.26700	.01570	.383
63	195.3	115.00	.70	21.97333	1.27045	-2.11761	.15100	2.26000	.13300	1.49000	.14700	-.35200	.02510	.375
64	196.4	114.99	.70	-	-	-	-	-	-	-	-	-	-	-
65	197.4	114.97	.70	-	-	-	-	-	-	-	-	-	-	-
66	198.5	114.94	.70	6.80071	.45670	-5.49979	.03440	1.52000	.07670	12.80000	3.43000	-.88200	.00551	.246
67	199.2	114.92	.70	22.48925	1.04809	-1.15525	.12200	2.48000	.10300	2.05000	.22800	-.18310	.01940	.394
68	200.5	114.86	.71	22.13749	.98685	-.75280	.12100	2.82000	.11500	2.18000	.26200	-.11810	.01890	.443
69	201.1	114.82	.71	20.09727	2.20460	-1.56752	.12800	2.32000	.17400	1.52000	.26200	-.24300	.01990	.360
70	202.4	114.74	.71	21.01185	.94404	-1.03785	.10400	2.36000	.11100	1.46000	.15700	-.15910	.01590	.362
71	203.1	114.69	.71	21.10565	1.49059	-1.90617	.15200	2.34000	.14800	1.43000	.18200	-.28900	.02300	.355
72	204.2	114.60	.71	-	-	-	-	-	-	-	-	-	-	-
73	205.2	114.51	.71	-	-	-	-	-	-	-	-	-	-	-
74	206.3	114.39	.71	15.05537	.83316	-2.33580	.14800	2.41000	.13300	1.57000	.22100	-.34400	.02180	.355
75	207.0	114.32	.71	15.66509	.93143	-2.57299	.16000	2.65000	.15700	1.47000	.18900	-.37500	.02340	.386

ϕ (deg)	$\delta\phi$ (deg)	I_o (mR)	δI_o (mR)	r_{min} (m)	$A_x(2^{nd})$ (mR-m)	δA_x (mR-m)	$y_o(2^{nd})$ (m)	δy_o (m)	$\sigma(2^{nd})$ (m)	$\delta\sigma(2^{nd})$ (m)	<Dose> (eV/cm^2)
.84000	.00616	.00532	.00286	-	-	-	-	-	-	-	-
1.38000	.01190	.01320	.00337	3.45169	-	-	-	-	-	-	3.920E+12
1.19000	.00881	.02767	.00345	3.47339	-	-	-	-	-	-	6.799E+12
1.12000	.01060	.02626	.00350	3.69856	-	-	-	-	-	-	5.879E+12
1.26000	.01030	.03353	.00350	3.81447	-	-	-	-	-	-	7.989E+12
-	-	.00366	.00008	-	-	-	-	-	-	-	-
-	-	.00288	.00006	-	-	-	-	-	-	-	-
1.32000	.01270	.01623	.00349	4.64216	-	-	-	-	-	-	1.027E+13
1.25000	.01310	.03377	.00355	4.41942	-	-	-	-	-	-	8.076E+12
1.21000	.01630	.03049	.00347	4.52656	-	-	-	-	-	-	4.964E+12
1.17000	.01450	.03072	.00342	4.34754	-	-	-	-	-	-	3.938E+12
1.11000	.01480	.03236	.00345	4.41264	-	-	-	-	-	-	2.849E+12
-	-	.02369	.00052	-	-	-	-	-	-	-	-
-	-	.00446	.00010	-	-	-	-	-	-	-	-
-	-	.00908	.00020	-	-	-	-	-	-	-	-
.91700	.01410	.02509	.00328	4.09526	-	-	-	-	-	-	1.309E+12
.88400	.01400	.01616	.00323	4.18899	-	-	-	-	-	-	1.103E+12
.77400	.01440	.01782	.00317	3.77699	-	-	-	-	-	-	8.317E+11
.78600	.01490	.01688	.00316	3.93065	-	-	-	-	-	-	7.290E+11
-	-	.01081	.00024	-	-	-	-	-	-	-	-
-	-	.00401	.00009	-	-	-	-	-	-	-	-
-	-	.00424	.00009	-	-	-	-	-	-	-	-
.71500	.01490	.01745	.00312	3.93065	-	-	-	-	-	-	5.748E+11
.72300	.01470	.01665	.00312	3.98719	-	-	-	-	-	-	4.502E+11
.69000	.01530	.01501	.00314	3.96513	-	-	-	-	-	-	4.314E+11
.64700	.01480	.01278	.00308	3.85883	-	-	-	-	-	-	3.522E+11
.66400	.01450	.01290	.00309	3.88765	-	-	-	-	-	-	3.484E+11
-	-	.00371	.00008	-	-	-	-	-	-	-	-
-	-	.00305	.00007	-	-	-	-	-	-	-	-
.60800	.01570	.01114	.00311	4.04057	-	-	-	-	-	-	2.972E+11
.60500	.01520	.01365	.00309	3.92997	-	-	-	-	-	-	2.622E+11
.52800	.01870	.01248	.00306	3.25811	4.83085	1.27780	6.86000	.88600	2.80000	.47700	2.755E+11
.54900	.01450	.01210	.00308	3.82318	0.70587	0.15229	10.80000	.25700	1.11000	.29000	2.388E+11
.53200	.01970	.01027	.00308	2.83164	10.48247	2.32838	3.26000	.56000	3.87000	.24500	2.457E+11
-	-	.00847	.00019	-	-	-	-	-	-	-	-
-	-	.00340	.00007	-	-	-	-	-	-	-	-
-	-	.00565	.00012	-	-	-	-	-	-	-	-
.46300	.02150	.00936	.00310	2.90018	8.18430	1.76566	3.86000	.60200	4.75000	.35900	1.801E+11
.43900	.01900	.01029	.00313	2.71220	8.02015	1.40410	4.62000	.55400	4.50000	.29100	1.794E+11
.47700	.01700	.00929	.00306	3.39830	3.14240	.90550	9.42000	1.33000	3.55000	.81200	1.643E+11
.45400	.01910	.00703	.00303	3.39959	1.52195	.95034	13.50000	2.84000	4.77000	1.78000	1.501E+11
-	-	.00417	.00009	-	-	-	-	-	-	-	-
-	-	.00673	.00015	-	-	-	-	-	-	-	-
-	-	.00385	.00008	-	-	-	-	-	-	-	-
.42600	.01630	.00879	.00308	3.25811	2.53268	.48163	12.30000	.63200	2.64000	.50900	1.458E+11
.44600	.02590	.00807	.00310	3.36294	2.50923	1.94250	9.68000	4.81000	5.01000	2.45000	1.252E+11
.41300	.01600	.00849	.00305	3.60880	2.04256	.35229	11.60000	.40200	2.14000	.34200	1.300E+11
.48100	.01820	.00978	.00306	3.89061	.66600	.33098	14.10000	.84800	1.61000	.86200	1.102E+11
.42200	.01730	.00795	.00310	3.20256	3.11895	.59027	10.70000	.72600	2.99000	.54200	1.148E+11
-	-	.00347	.00008	-	-	-	-	-	-	-	-
-	-	.00244	.00005	-	-	-	-	-	-	-	-
.41700	.01530	.00610	.00322	3.18947	4.12733	.89574	7.52000	1.56000	6.84000	.81600	1.067E+11
.40000	.01620	.00837	.00308	3.17897	2.34507	.41362	10.90000	.66700	2.83000	.54100	1.053E+11
.39400	.01830	.00823	.00308	3.26105	2.55613	.72213	9.03000	1.47000	4.09000	.99600	8.903E+10
.42100	.01740	.01037	.00310	3.72195	1.65562	.42602	8.32000	.50300	1.96000	.42900	9.030E+10
.30400	.01600	.00689	.00310	2.22186	5.81578	.78207	2.05000	.57500	5.44000	.49300	7.323E+10
-	-	.00371	.00008	-	-	-	-	-	-	-	-
-	-	.00879	.00019	-	-	-	-	-	-	-	-
-	-	.01022	.00022	-	-	-	-	-	-	-	-
.41700	.01550	.00959	.00310	3.70278	1.25461	.24777	8.52000	.44800	2.11000	.47400	7.632E+10
.37800	.01870	.00532	.00307	3.45268	3.00169	1.18610	5.24000	2.36000	4.89000	1.40000	7.286E+10
.38300	.01740	.00830	.00310	3.82255	1.77287	.38423	9.66000	.76500	3.11000	.68400	6.724E+10
.37500	.02210	.00715	.00317	3.61033	2.69683	1.02885	5.21000	1.87000	4.03000	1.25000	6.904E+10
-	-	.00675	.00015	-	-	-	-	-	-	-	-
-	-	.00361	.00008	-	-	-	-	-	-	-	-
.24400	.01230	.00427	.00307	-	-	-	-	-	-	-	-
.39400	.01640	.00652	.00319	3.47611	2.00269	.43140	9.73000	.93400	3.76000	.87600	6.842E+10
.44300	.01810	.00901	.00313	3.86882	1.34138	.28295	9.47000	.34000	1.64000	.31800	5.924E+10
.36000	.02700	.00607	.00331	3.67202	1.96986	2.10398	8.67000	4.93000	4.99000	2.09000	5.600E+10
.36200	.01700	.00586	.00322	3.80651	1.00838	.24022	11.10000	.59700	2.34000	.63300	5.533E+10
.35500	.02250	.00396	.00324	3.81216	3.23620	1.20045	4.20000	3.27000	5.81000	2.03000	5.490E+10
-	-	.00464	.00010	-	-	-	-	-	-	-	-
-	-	.00504	.00011	-	-	-	-	-	-	-	-
.35500	.01960	.00591	.00319	3.75882	1.32497	.38570	10.10000	1.26000	3.46000	1.09000	3.777E+10
.38600	.02290	.00455	.00319	4.26040	.52530	.16012	10.90000	.62500	1.69000	.63000	3.432E+10

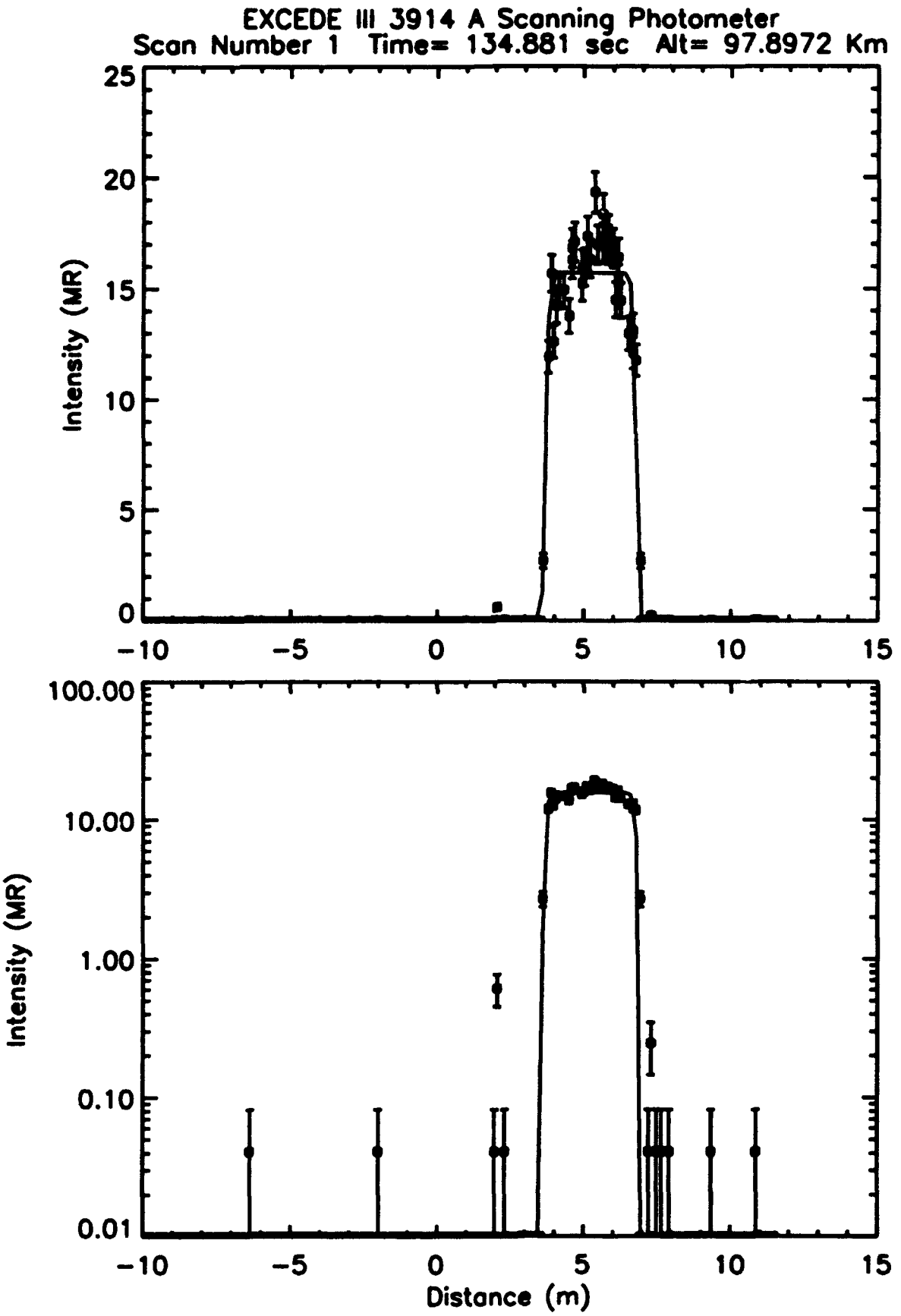
2

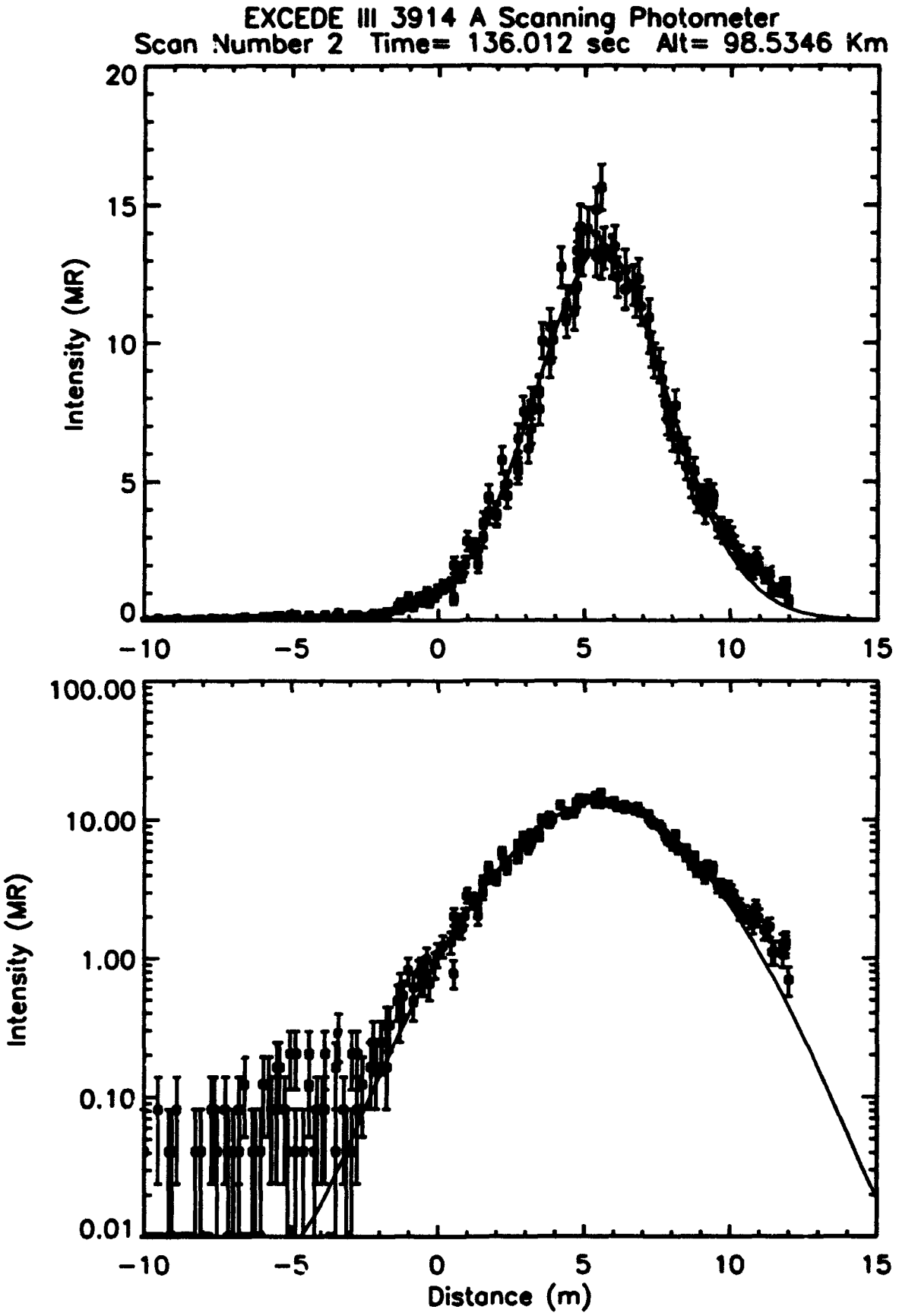
SCAN #	TIME (s)	ALT. (km)	SINΘ	A_c (MR-m)	A_t (MR-m)	y_o (m)	δy_o (m)	σ (m)	$\delta\sigma$ (m)	p	δp	γ_o (deg)	$\delta\gamma_o$ (deg)
76	208.3	114.17	.71	15.61818	.97260	-2.65089	.14400	2.40000	.15200	1.47000	.21000	-.38200	.02080
77	208.9	114.08	.71	15.60854	.89688	-3.21616	.14600	2.52000	.14900	1.79000	.25200	-.46000	.02080
78	210.2	113.90	.71	15.43058	.82577	-3.03439	.15100	2.64000	.14600	1.50000	.18500	-.42900	.02130
79	211.0	113.78	.70	-	-	-	-	-	-	-	-	-	-
80	212.0	113.63	.70	-	-	-	-	-	-	-	-	-	-
81	212.8	113.49	.70	11.53776	.72370	-4.73588	.17000	2.92000	.16900	2.41000	.43100	-.65000	.02340
82	214.1	113.27	.70	14.51600	.79402	-3.33315	.14500	2.65000	.14300	1.46000	.19400	-.45300	.01970
83	214.8	113.14	.70	12.63994	.82894	-4.70132	.18600	2.82000	.19000	2.11000	.33900	-.63200	.02500
84	216.1	112.90	.70	17.86945	.99980	-4.32750	.15400	2.66000	.15100	1.49000	.17500	-.57700	.02050
85	216.8	112.76	.70	17.07213	.91544	-4.87589	.14100	2.75000	.16000	1.55000	.20200	-.64300	.01860
86	217.9	112.52	.70	-	-	-	-	-	-	-	-	-	-
87	218.9	112.31	.70	-	-	-	-	-	-	-	-	-	-
88	220.0	112.04	.70	25.56129	1.10174	-4.11582	.10300	2.75000	.11000	1.84000	.18200	-.52900	.01320
89	220.7	111.89	.70	23.91974	1.46933	-5.19357	.14600	2.67000	.14000	1.60000	.18100	-.66100	.01860
90	221.9	111.57	.70	22.23129	2.46444	-5.27048	.14100	2.52000	.17600	1.61000	.23300	-.66500	.01780
91	222.6	111.39	.70	22.55960	1.30572	-5.96800	.15700	2.76000	.15000	2.05000	.25300	-.74600	.01970
92	223.9	111.05	.70	24.62326	1.08931	-5.72564	.12700	3.00000	.12000	1.80000	.19400	-.70900	.01580
93	224.6	110.87	.70	11.13910	.82070	-8.86190	.12700	1.57000	.14300	3.01000	.65500	-1.08900	.01560
94	225.7	110.54	.70	-	-	-	-	-	-	-	-	-	-
95	226.7	110.26	.70	-	-	-	-	-	-	-	-	-	-
96	227.8	109.91	.70	27.20284	1.24389	-6.56462	.12400	2.87000	.13800	1.55000	.16600	-.78500	.01490
97	228.5	109.70	.70	24.15425	1.17315	-7.13024	.13300	2.86000	.14100	1.95000	.24000	-.84700	.01580
98	229.8	109.29	.70	27.90636	1.24324	-6.97850	.14600	3.22000	.13900	1.89000	.20700	-.82100	.01720
99	230.4	109.07	.70	29.54792	2.70573	-5.74470	.16000	3.06000	.18700	1.66000	.19900	-.67100	.01870
100	231.6	108.68	.70	-	-	-	-	-	-	-	-	-	-
101	232.5	108.34	.70	-	-	-	-	-	-	-	-	-	-
102	233.5	107.98	.70	-	-	-	-	-	-	-	-	-	-
103	234.3	107.68	.70	40.56976	1.78463	4.77660	.12300	3.22000	.12000	1.84000	.18400	.54000	.01390
104	235.6	107.21	.70	39.86624	1.66399	5.35934	.11200	2.91000	.13000	1.33000	.11600	.60100	.01250
105	236.3	106.93	.70	36.34863	1.64703	4.20136	.12800	3.17000	.12400	1.68000	.15600	.46700	.01420
106	237.5	106.44	.70	37.75567	1.60775	4.70448	.13000	3.47000	.11500	2.19000	.21300	.51900	.01430
107	238.2	106.15	.70	39.16272	1.66189	3.58604	.12600	3.13000	.13100	1.68000	.15300	.39200	.01380
108	239.4	105.69	.70	-	-	-	-	-	-	-	-	-	-
109	240.3	105.28	.70	-	-	-	-	-	-	-	-	-	-
110	241.5	104.79	.70	53.23315	1.94838	-3.13526	.10200	3.18000	.09860	1.67000	.13000	-.33500	.01090
111	242.1	104.49	.70	56.04724	2.05306	-3.85097	.11300	3.48000	.10900	1.90000	.14400	-.40900	.01200
112	243.4	103.91	.70	61.90992	2.75257	-3.37851	.14800	3.57000	.15300	1.80000	.18100	-.35600	.01560
113	244.1	103.60	.70	65.42753	2.66420	-4.18792	.15400	3.79000	.14100	1.87000	.15800	-.43700	.01610
114	245.4	103.00	.70	79.02895	2.97609	-1.98152	.11000	3.72000	.11900	1.61000	.10900	-.20600	.01150
115	246.2	102.61	.70	-	-	-	-	-	-	-	-	-	-
116	247.2	102.12	.70	-	-	-	-	-	-	-	-	-	-
117	248.1	101.64	.70	-	-	-	-	-	-	-	-	-	-
118	249.3	101.07	.70	81.13951	3.67535	.10902	.15300	4.01000	.17000	1.75000	.16400	.01100	.01540
119	249.9	100.71	.70	87.47121	3.33214	-.77170	.14300	4.23000	.13300	2.27000	.21600	-.07750	.01430
120	251.2	100.05	.71	87.47121	3.33214	-1.30799	.12400	4.18000	.15200	1.64000	.12600	-.12990	.01240
121	251.9	99.69	.72	96.61700	3.67807	-4.11325	.14700	4.46000	.16700	2.10000	.20200	-.40600	.01450
122	253.0	99.07	.74	-	-	-	-	-	-	-	-	-	-
123	254.0	98.53	.76	-	-	-	-	-	-	-	-	-	-
124	255.0	97.98	.78	-	-	-	-	-	-	-	-	-	-
125	255.8	97.50	.79	140.23540	5.17178	3.31912	.15700	4.32000	.12900	1.58000	.09240	.31900	.01510
126	257.0	96.78	.81	138.12480	4.40518	9.03740	.12100	4.83000	.13300	1.59000	.09590	.85900	.01150
127	257.8	96.35	.82	195.57910	10.08616	10.23337	.13200	3.91000	.25000	1.28000	.12800	.96900	.01250
128	259.0	95.62	.84	162.04450	6.04165	14.12643	.20300	5.37000	.16300	2.32000	.16900	1.32900	.01910
129	259.8	95.16	.85	216.21570	6.69661	14.11887	.11900	4.67000	.10300	1.65000	.09270	1.31900	.01110
130	260.9	94.46	.86	-	-	-	-	-	-	-	-	-	-
131	261.8	93.89	.87	-	-	-	-	-	-	-	-	-	-
132	262.9	93.19	.89	300.16930	8.29422	18.80169	.08510	4.62000	.08170	1.80000	.07760	1.72900	.00780
133	263.6	92.70	.89	354.10600	9.73580	17.89075	.08480	4.56000	.08710	1.70000	.06730	1.62900	.00773
134	264.8	91.92	.91	457.28920	12.09105	15.48227	.06900	4.32000	.07370	1.48000	.05230	1.39900	.00625
135	265.6	91.42	.91	236.85230	7.41569	11.28179	.13700	4.41000	.09990	1.76000	.10200	1.01900	.01240
136	266.8	90.60	.92	684.76120	17.70936	8.46111	.05630	3.79000	.05740	1.68000	.05740	.75700	.00503
137	267.7	90.02	.93	-	-	-	-	-	-	-	-	-	-
138	268.6	89.34	.94	-	-	-	-	-	-	-	-	-	-
139	269.6	88.66	.95	-	-	-	-	-	-	-	-	-	-
140	270.7	87.87	.96	4.73705	1.26828	3.45177	.90200	7.84000	.49000	.73400	.38800	.30100	.07860
141	271.6	87.27	.96	-	-	-	-	-	-	-	-	-	-
142	272.5	86.54	.96	-	-	-	-	-	-	-	-	-	-
143	273.5	85.84	.95	-	-	-	-	-	-	-	-	-	-
144	274.5	85.09	.95	-	-	-	-	-	-	-	-	-	-
145	275.5	84.37	.95	-	-	-	-	-	-	-	-	-	-
146	276.5	83.60	.95	-	-	-	-	-	-	-	-	-	-
147	277.3	82.92	.95	675.38090	19.59889	34.38936	.06490	4.68000	.10600	1.51000	.06980	2.86900	.00542
148	278.5	81.98	.95	103.41770	4.01370	.21630	.26500	7.59000	.25900	1.77000	.16400	.01800	.02200
149	279.2	81.47	.94	210.82200	6.62959	-30.12643	.13500	5.59000	.14400	1.56000	.08230	-2.48100	.01120
150	280.4	80.52	-	-	-	-	-	-	-	-	-	-	-

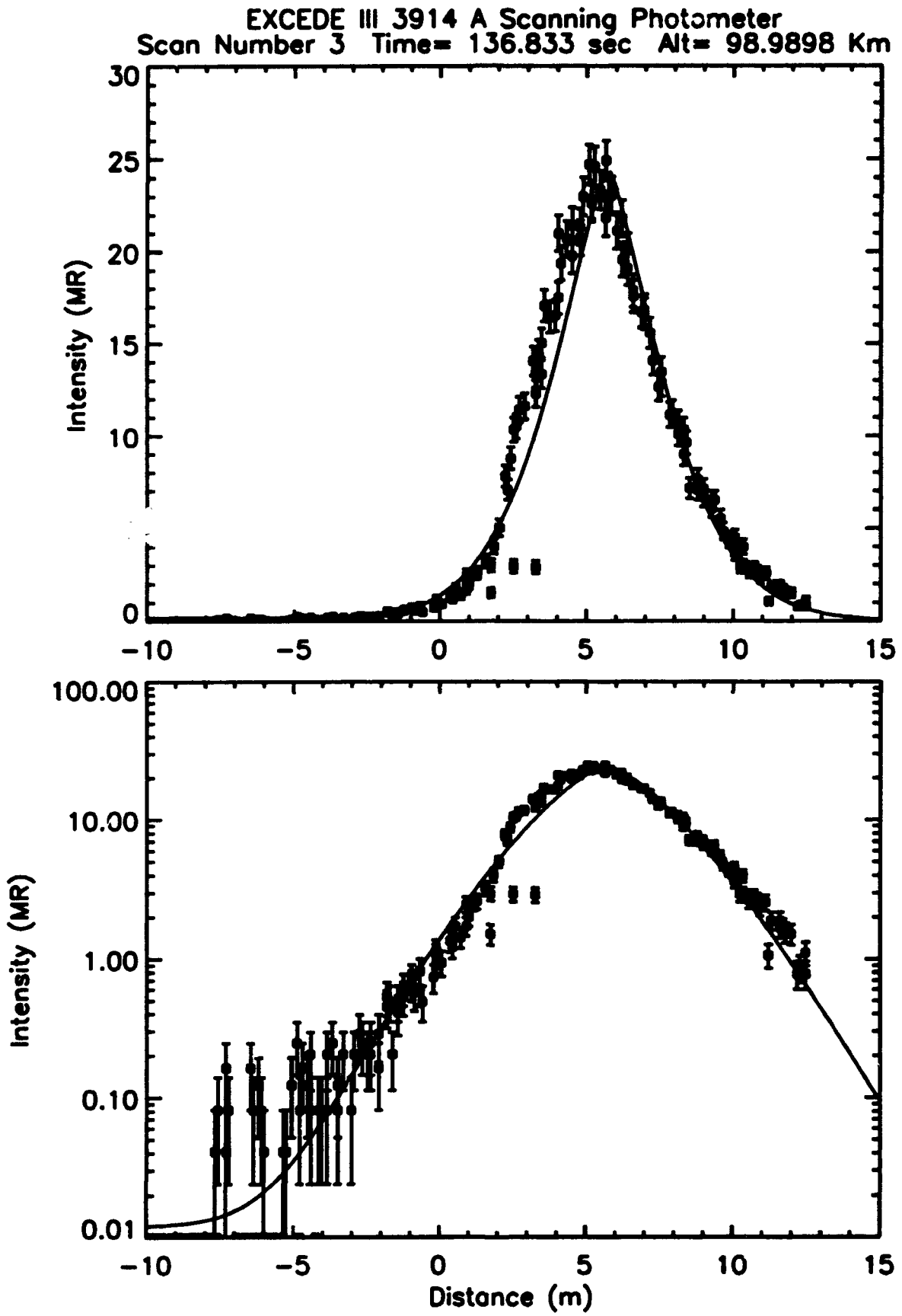
σ (deg)	$\delta\sigma$ (deg)	I_o (mR)	δI_o (mR)	r_{max} (m)	$A_x(2^{nd})$ (mR-m)	δA_x (mR-m)	$y_o(2^{nd})$ (m)	δy_o (m)	$\sigma(2^{nd})$ (m)	$\delta\sigma(2^{nd})$ (m)	<Dose> (eV/cm^2)
.34600	.02190	.00497	.00324	3.85848	1.23820	.61736	8.58000	3.78000	6.20000	3.19000	3.705E+10
.36000	.02120	.00612	.00319	3.71813	1.32497	.37167	10.80000	1.50000	4.18000	1.49000	3.822E+10
.37200	.02070	.00497	.00324	4.20421	.83250	.34755	10.70000	2.38000	4.40000	2.48000	3.261E+10
-	-	.00462	.00010	-	-	-	-	-	-	-	-
-	-	.00628	.00014	-	-	-	-	-	-	-	-
.40000	.02320	.00455	.00324	3.87678	.69649	.27246	7.67000	1.29000	2.97000	1.36000	2.545E+10
.36000	.01940	.00382	.00317	4.27425	.85361	.19508	10.50000	.34700	1.31000	.32300	2.852E+10
.37900	.02560	.00511	.00321	3.91259	.96851	.27988	8.37000	1.15000	3.57000	1.14000	2.688E+10
.35500	.02010	.00392	.00326	4.24932	1.15143	.58916	11.00000	3.45000	5.40000	2.93000	3.437E+10
.36300	.02110	.00368	.00326	4.31394	.92161	.24940	10.10000	.78900	2.41000	.71900	3.206E+10
-	-	.00363	.00008	-	-	-	-	-	-	-	-
-	-	.00809	.00018	-	-	-	-	-	-	-	-
.35300	.01410	.00556	.00329	4.01351	.98962	.23341	11.50000	.64100	2.13000	.63400	4.944E+10
.33900	.01780	.00628	.00354	4.12949	1.93703	1.09129	8.31000	5.80000	4.32000	5.63000	4.459E+10
.31800	.02220	.00633	.00336	3.88684	3.33000	2.26418	3.06000	7.20000	7.52000	4.06000	4.332E+10
.34500	.01880	.00600	.00338	3.86858	2.72028	.74579	6.32000	1.75000	5.36000	1.65000	4.382E+10
.37200	.01480	.00699	.00329	4.41652	1.27103	.33417	10.60000	1.20000	3.74000	1.22000	4.124E+10
.19300	.01760	.00415	.00317	1.95474	-	-	-	-	-	-	4.183E+10
-	-	.00448	.00010	-	-	-	-	-	-	-	-
-	-	.00521	.00011	-	-	-	-	-	-	-	-
.34400	.01650	.00675	.00333	4.50218	1.24289	.29908	11.30000	1.23000	4.52000	1.18000	4.272E+10
.33900	.01680	.00786	.00343	4.08258	1.42346	.34147	7.58000	.86000	3.18000	.82800	4.153E+10
.37900	.01640	.00638	.00336	4.65100	1.50319	.38835	8.09000	1.51000	5.16000	1.55000	4.153E+10
.35700	.02180	.00631	.00345	4.65775	3.21275	2.53366	6.13000	7.03000	7.48000	4.04000	4.357E+10
-	-	.01173	.00026	-	-	-	-	-	-	-	-
-	-	.00363	.00008	-	-	-	-	-	-	-	-
-	-	.00119	.00003	-	-	-	-	-	-	-	-
.36400	.01410	.00685	.00343	4.69946	1.56416	.39080	21.80000	1.05000	3.71000	1.07000	5.682E+10
.32600	.01450	.00865	.00350	4.91641	1.19364	.27329	22.60000	.54100	2.43000	.51500	5.272E+10
.35200	.01380	.00680	.00352	4.80072	1.81743	.35170	22.30000	.74800	3.42000	.76700	4.889E+10
.38300	.01270	.00727	.00347	4.75318	1.82916	.32379	22.60000	.73600	3.86000	.74300	5.068E+10
.34300	.01430	.00884	.00369	4.74014	2.39197	.36031	21.90000	.57600	3.47000	.49500	5.236E+10
-	-	.00525	.00012	-	-	-	-	-	-	-	-
-	-	.00231	.00005	-	-	-	-	-	-	-	-
.34100	.01060	.00711	.00385	4.82805	2.10353	.38504	14.80000	.62000	3.46000	.64300	6.793E+10
.36900	.01160	.00692	.00373	5.01644	3.91627	.84861	12.50000	.92600	4.10000	.88800	6.843E+10
.37600	.01610	.00943	.00402	5.25565	2.26300	.69359	15.00000	1.72000	4.77000	1.44000	7.134E+10
.39700	.01480	.00917	.00387	5.49672	2.39197	.45332	15.70000	.75600	3.75000	.70400	7.165E+10
.38600	.01240	.00793	.00401	5.73772	1.48209	.36261	16.80000	.47500	2.02000	.50300	8.203E+10
-	-	.00446	.00010	-	-	-	-	-	-	-	-
-	-	.00469	.00010	-	-	-	-	-	-	-	-
-	-	.00460	.00010	-	-	-	-	-	-	-	-
.40500	.01710	.01128	.00399	5.97082	3.84592	.74586	20.70000	1.33000	5.47000	1.14000	7.833E+10
.42400	.01340	.00729	.00387	5.72518	6.40205	.86283	18.20000	.65000	4.16000	.52100	8.761E+10
.41500	.01510	.00790	.00390	6.39571	4.52599	.75235	19.60000	.52800	3.34000	.51000	7.856E+10
.44000	.01650	.00861	.00404	6.19829	5.34677	.83148	14.60000	.82500	4.23000	.73200	9.050E+10
-	-	.00961	.00021	-	-	-	-	-	-	-	-
-	-	.00242	.00005	-	-	-	-	-	-	-	-
-	-	.00317	.00007	-	-	-	-	-	-	-	-
.41500	.01240	.00926	.00404	6.71874	7.19937	1.07174	23.70000	.95600	5.28000	.81000	1.289E+11
.46100	.01270	.00877	.00399	7.49091	5.81578	.87938	30.80000	.68700	3.55000	.53900	1.155E+11
.37100	.02370	.01046	.00399	6.74072	7.17592	.79441	33.30000	.34300	2.86000	.32100	1.835E+11
.50600	.01530	.01076	.00395	7.21662	15.75889	3.16146	32.50000	1.79000	6.70000	1.01000	1.435E+11
.43700	.00959	.01100	.00397	7.12679	10.97494	1.41605	34.10000	.74500	4.72000	.59700	1.949E+11
-	-	.00645	.00014	-	-	-	-	-	-	-	-
-	-	.00500	.00011	-	-	-	-	-	-	-	-
.42400	.00749	.01018	.00390	6.80143	20.96495	1.79787	40.40000	.57300	5.48000	.44200	2.894E+11
.41600	.00794	.01278	.00407	6.87151	23.40382	2.22718	39.20000	.56100	5.16000	.38700	3.393E+11
.39100	.00667	.01660	.00400	6.92303	23.91974	1.99140	36.50000	.47800	4.97000	.49000	4.367E+11
.39700	.00898	.01168	.00399	6.55120	32.83102	2.13558	31.70000	.39800	5.26000	.32200	2.396E+11
.33800	.00513	.01259	.00402	5.73966	38.69370	2.12657	30.30000	.25200	4.39000	.25100	7.942E+11
-	-	.00492	.00011	-	-	-	-	-	-	-	-
-	-	.00258	.00006	-	-	-	-	-	-	-	-
-	-	.00521	.00011	-	-	-	-	-	-	-	-
.68400	.30400	.00560	.00448	19.96457	-	-	-	-	-	-	1.588E+09
-	-	.01037	.00023	-	-	-	-	-	-	-	-
-	-	.01187	.00026	-	-	-	-	-	-	-	-
-	-	.01728	.00038	-	-	-	-	-	-	-	-
-	-	.01086	.00024	-	-	-	-	-	-	-	-
-	-	.00148	.00003	-	-	-	-	-	-	-	-
-	-	.00976	.00021	-	-	-	-	-	-	-	-
.39200	.00885	.01461	.00407	7.42996	22.93481	2.05163	58.50000	.61200	5.28000	.41800	5.781E+11
.63000	.02150	.01062	.00397	11.24936	6.58965	1.23967	29.20000	1.37000	6.16000	1.22000	5.775E+10
.46100	.01190	.01592	.00393	8.74364	10.20107	1.78237	-4.85000	1.05000	5.13000	.69400	1.487E+11
-	-	.01998	.00044	-	-	-	-	-	-	-	-

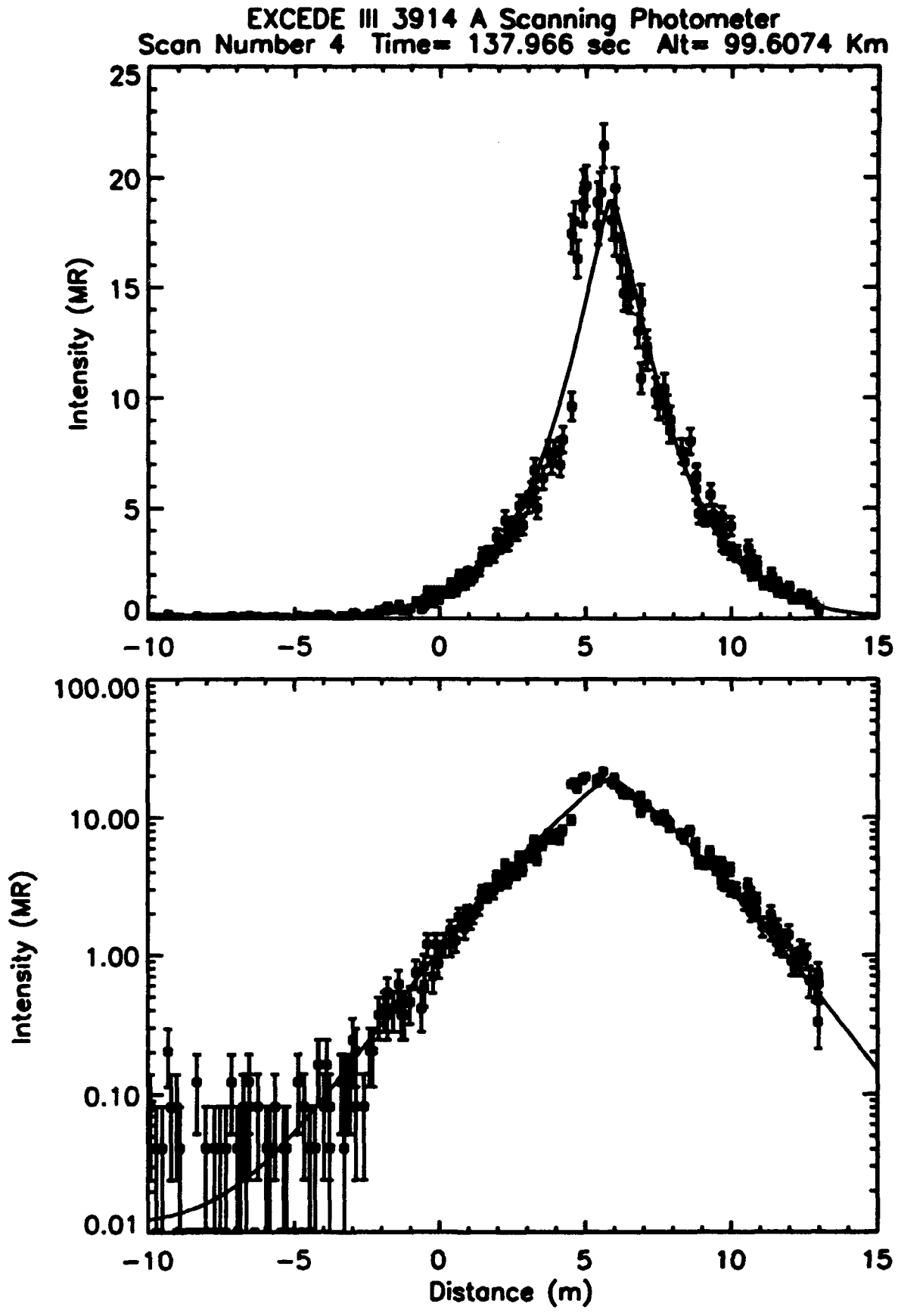
2

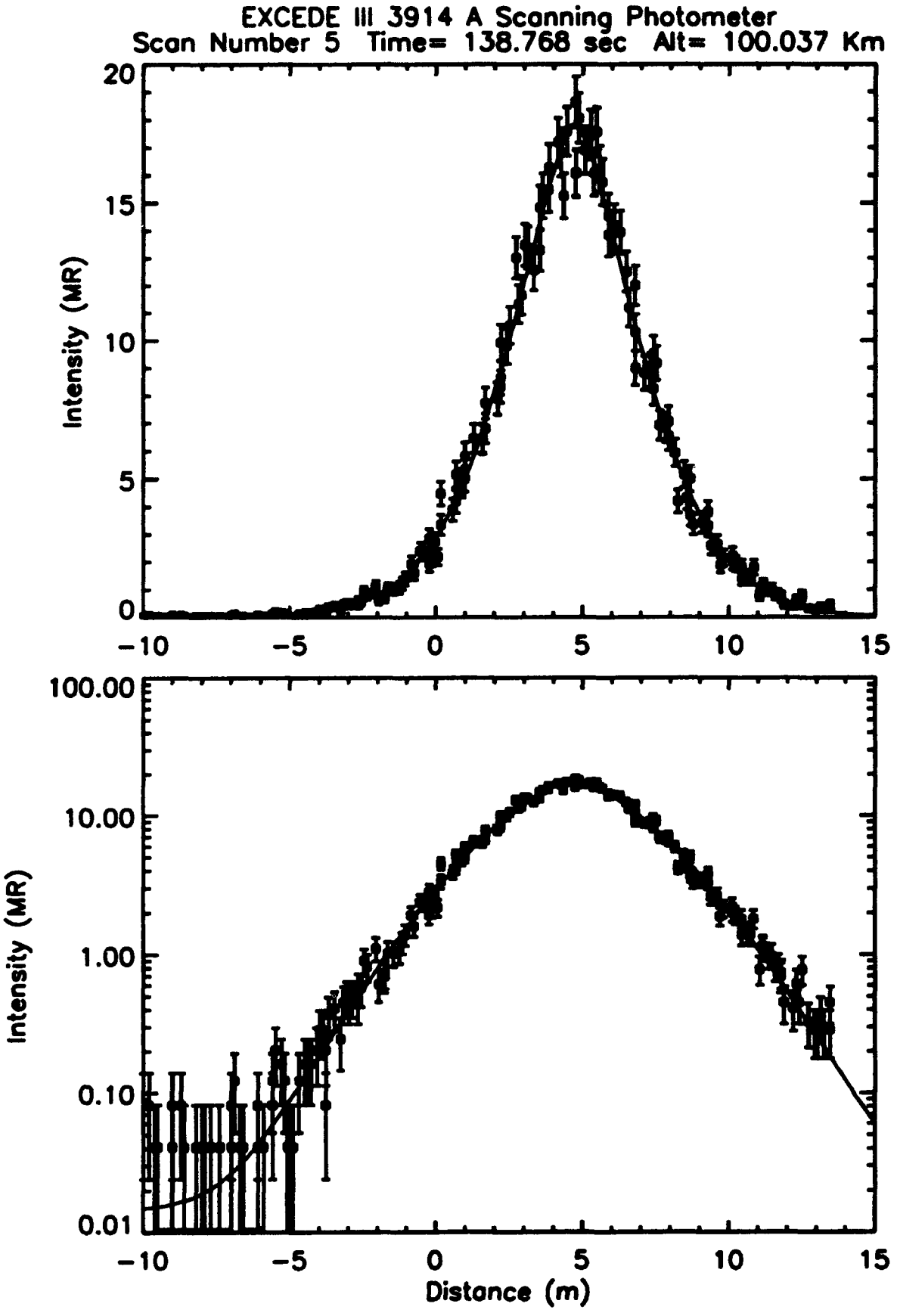
Appendix C: Catalog of 3914 Å Scanning Photometer Data and Corresponding Fits

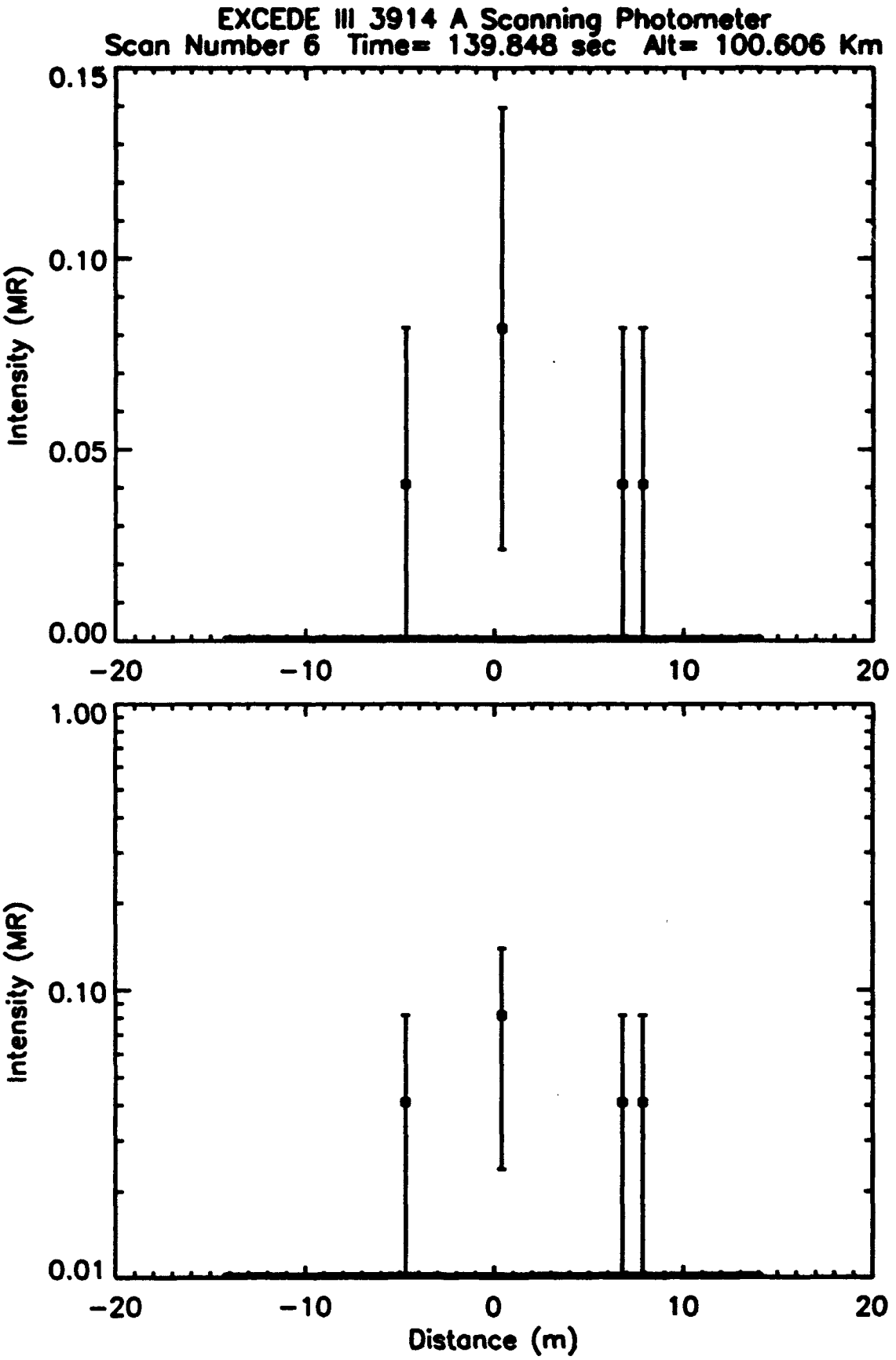

EXCEDE III 3914 A Scanning Photometer
Scan Number 1 Time= 134.881 sec Alt= 97.8972 Km
Intensity (MR)
25
20
15
10
5
0
−10
−5
0
5
10
15
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

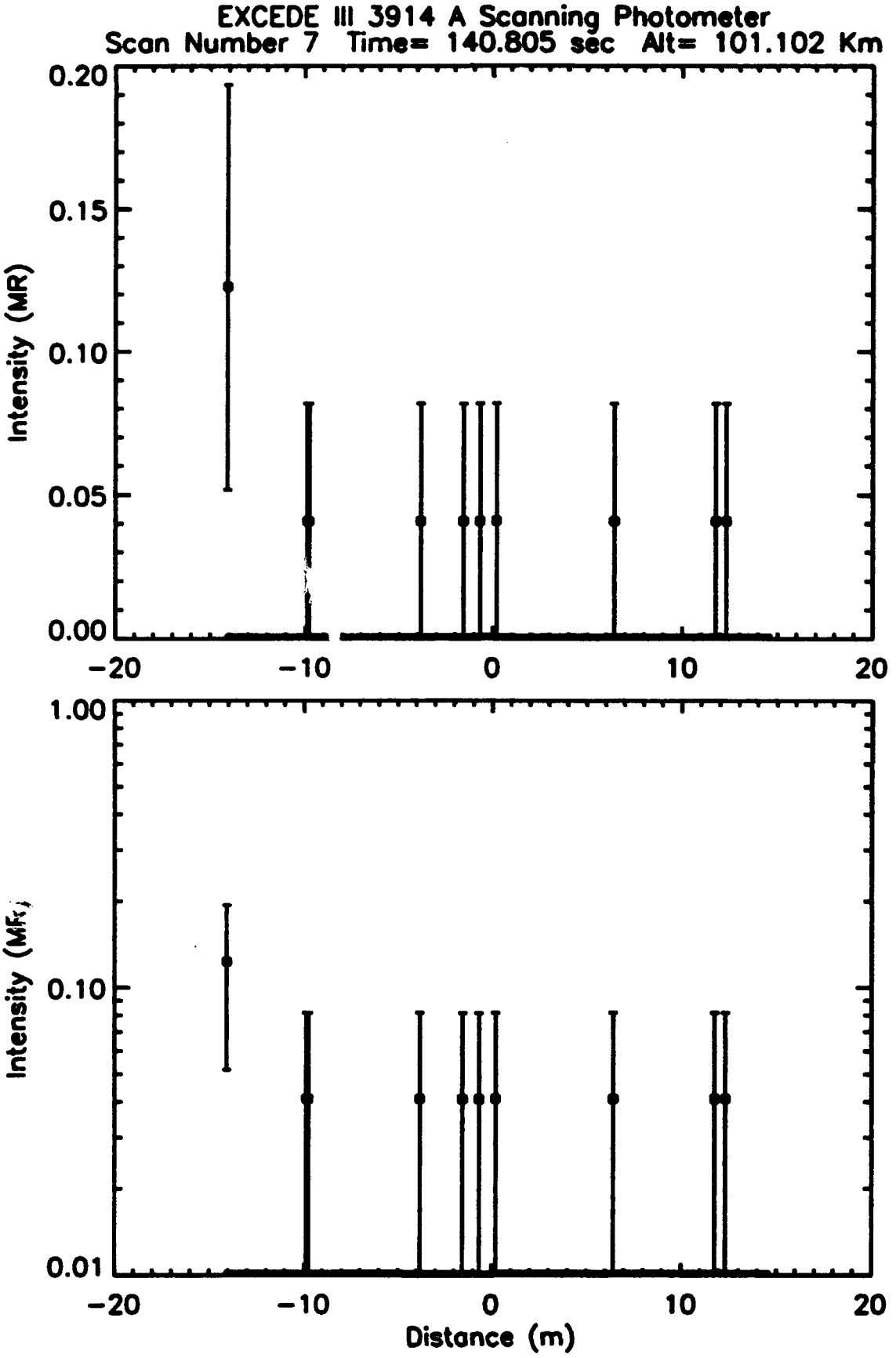

EXCEDE III 3914 A Scanning Photometer
Scan Number 2 Time= 136.012 sec Alt= 98.5346 Km
Intensity (MR)
20
15
10
5
0
−10
−5
0
5
10
15
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
−10
−5
0
5
10
15
Distance (m)

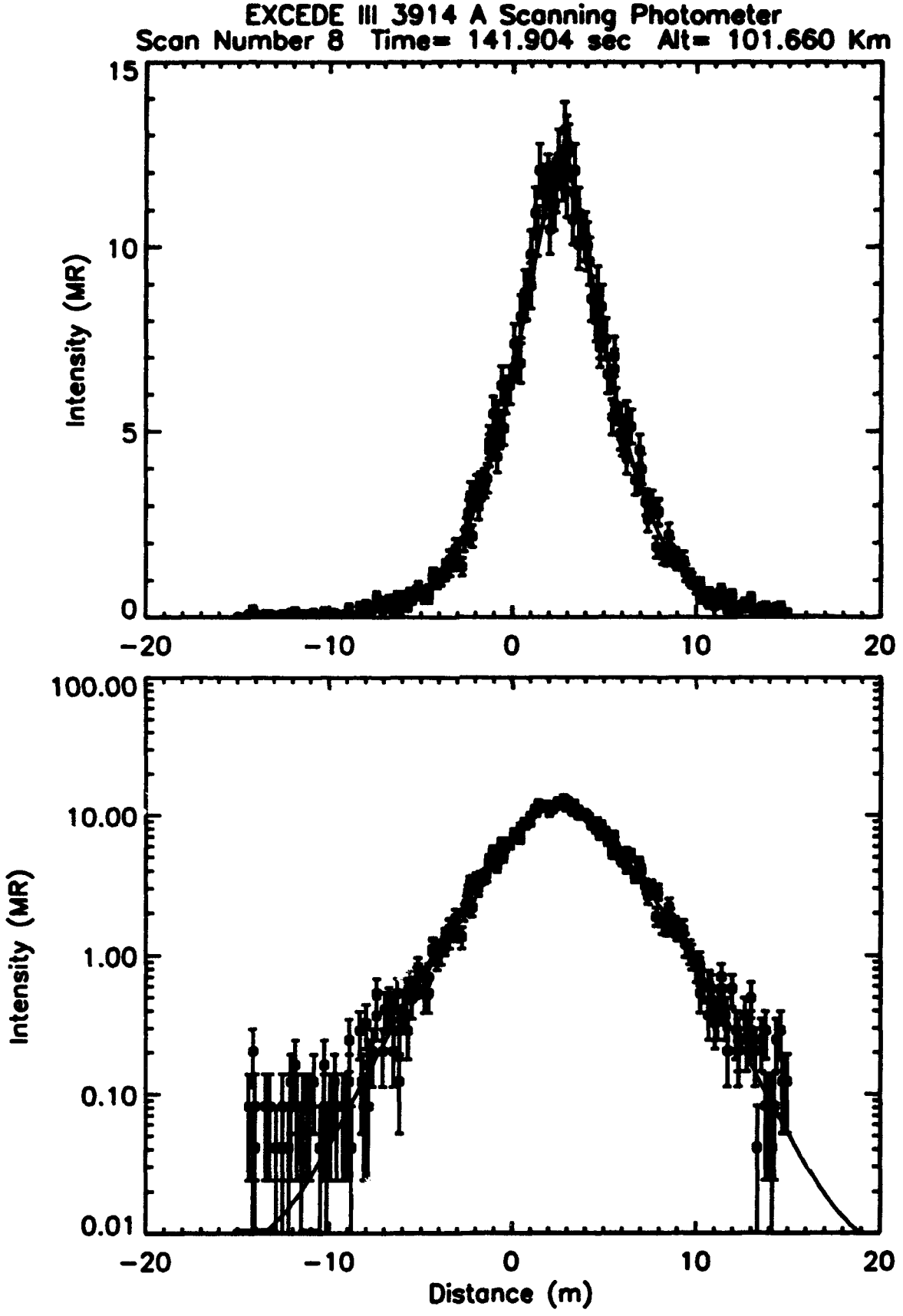

EXCEDE III 3914 A Scanning Photometer
Scan Number 3 Time= 136.833 sec Alt= 98.9898 Km
Intensity (MR)
30
25
20
15
10
0
−10
−5
0
5
10
15
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

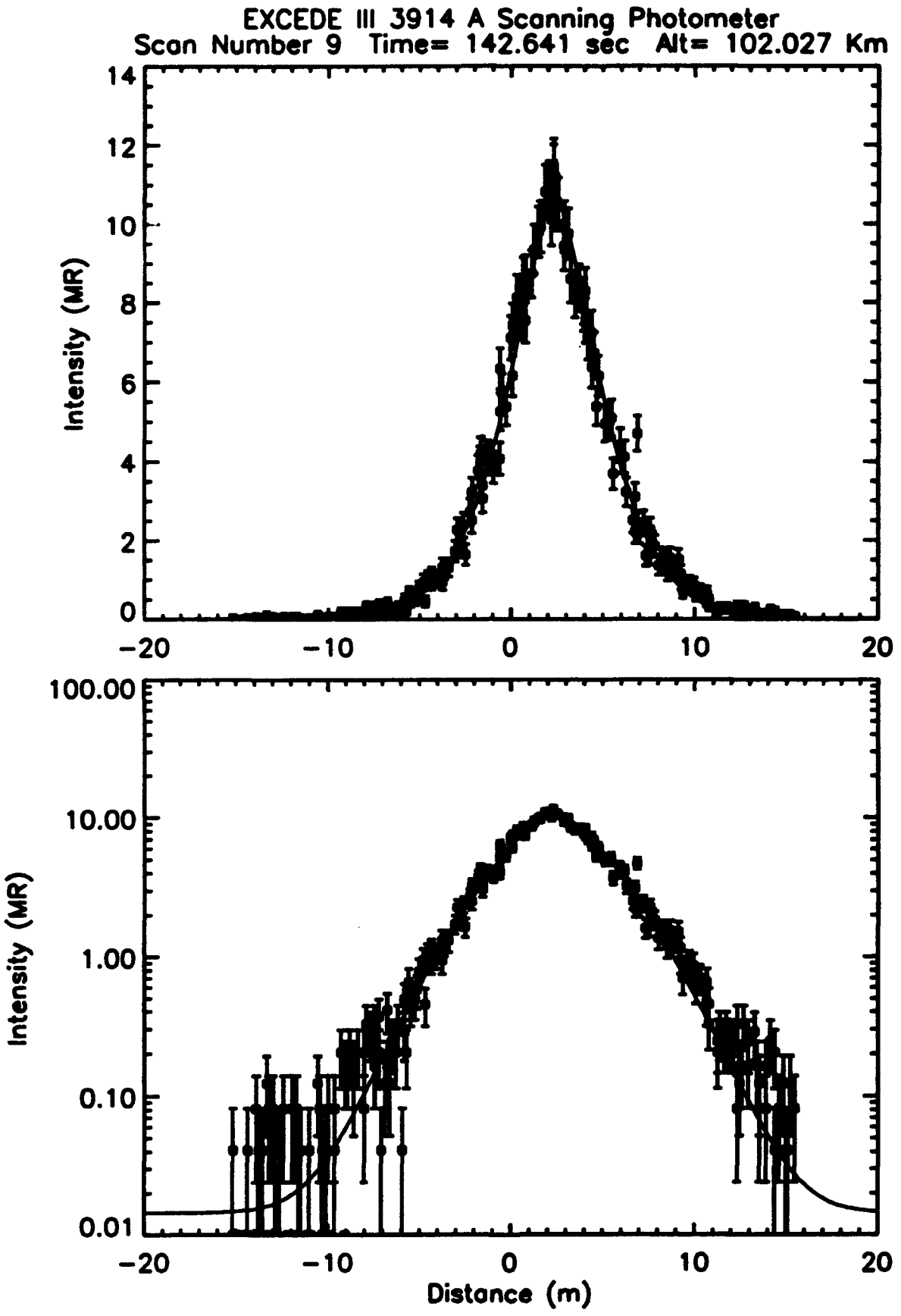

EXCEDE III 3914 A Scanning Photometer
Scan Number 4 Time= 137.966 sec Alt= 99.6074 Km
Intensity (MR)
25
20
15
10
5
0
−10
−5
0
5
10
15
Intensity (MR)
100.00
10.00
1.00
0.10
0.01
−10
−5
0
5
10
15
Distance (m)

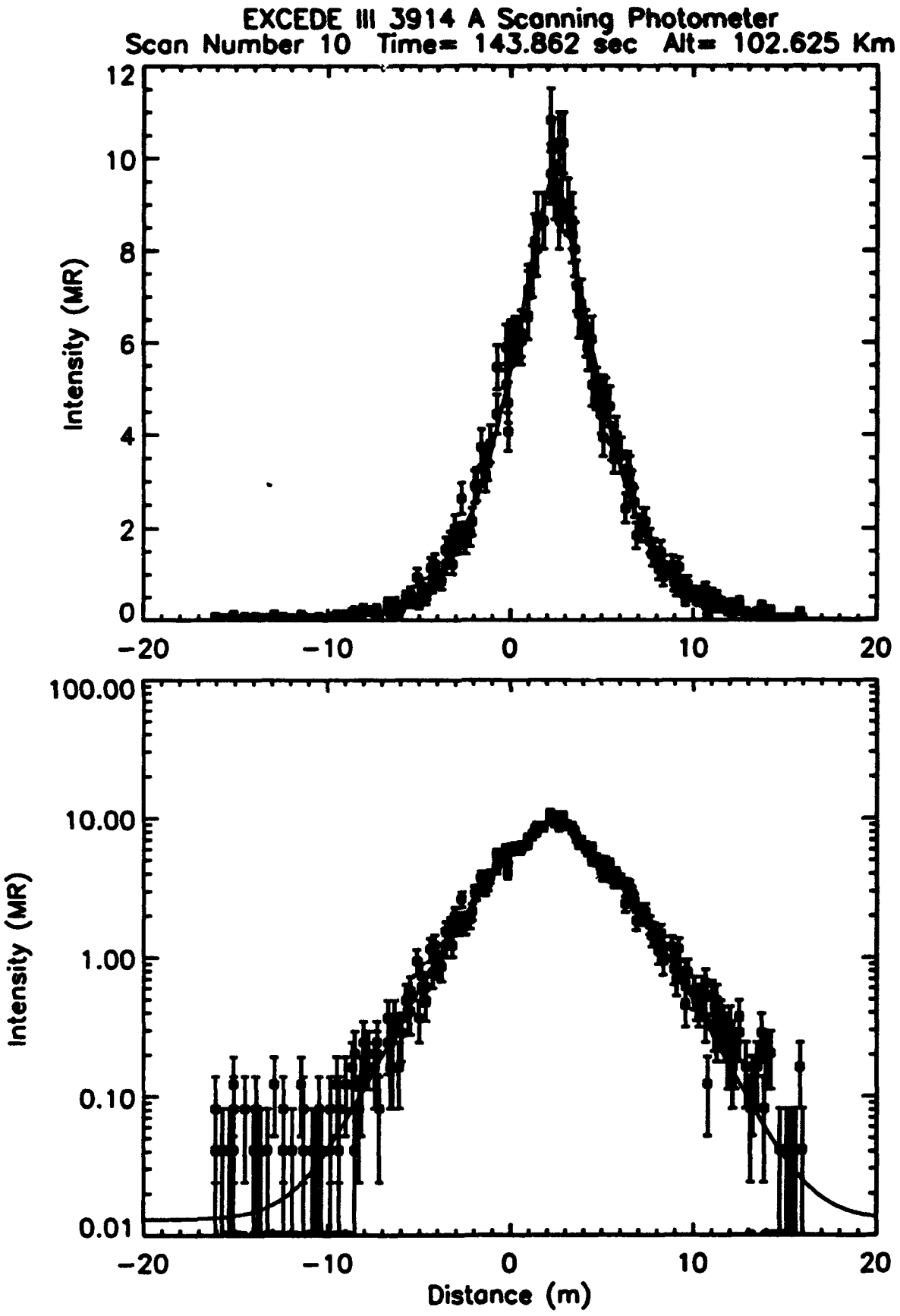

EXCEDE III 3914 A Scanning Photometer
Scan Number 5 Time= 138.768 sec Alt= 100.037 Km
Intensity (MR)
20
15
10
5
0
−10
−5
0
5
10
15
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
−10
−5
0
5
10
15
Distance (m)

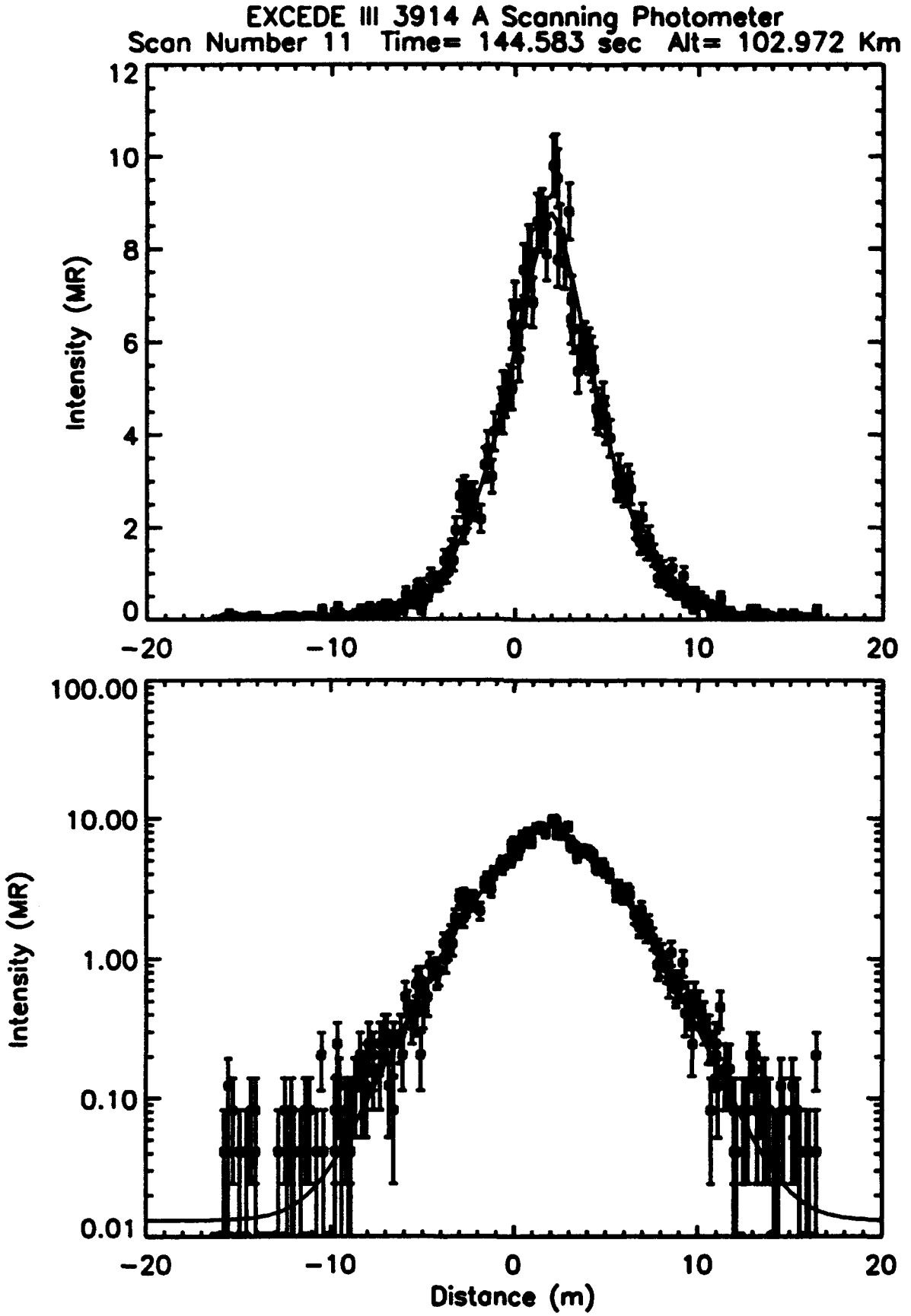

EXCEDE III 3914 A Scanning Photometer
Scan Number 6 Time= 139.848 sec Alt= 100.606 Km
0.15
0.10
0.05
0.00
Intensity (MR)
−20
−10
0
10
20
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

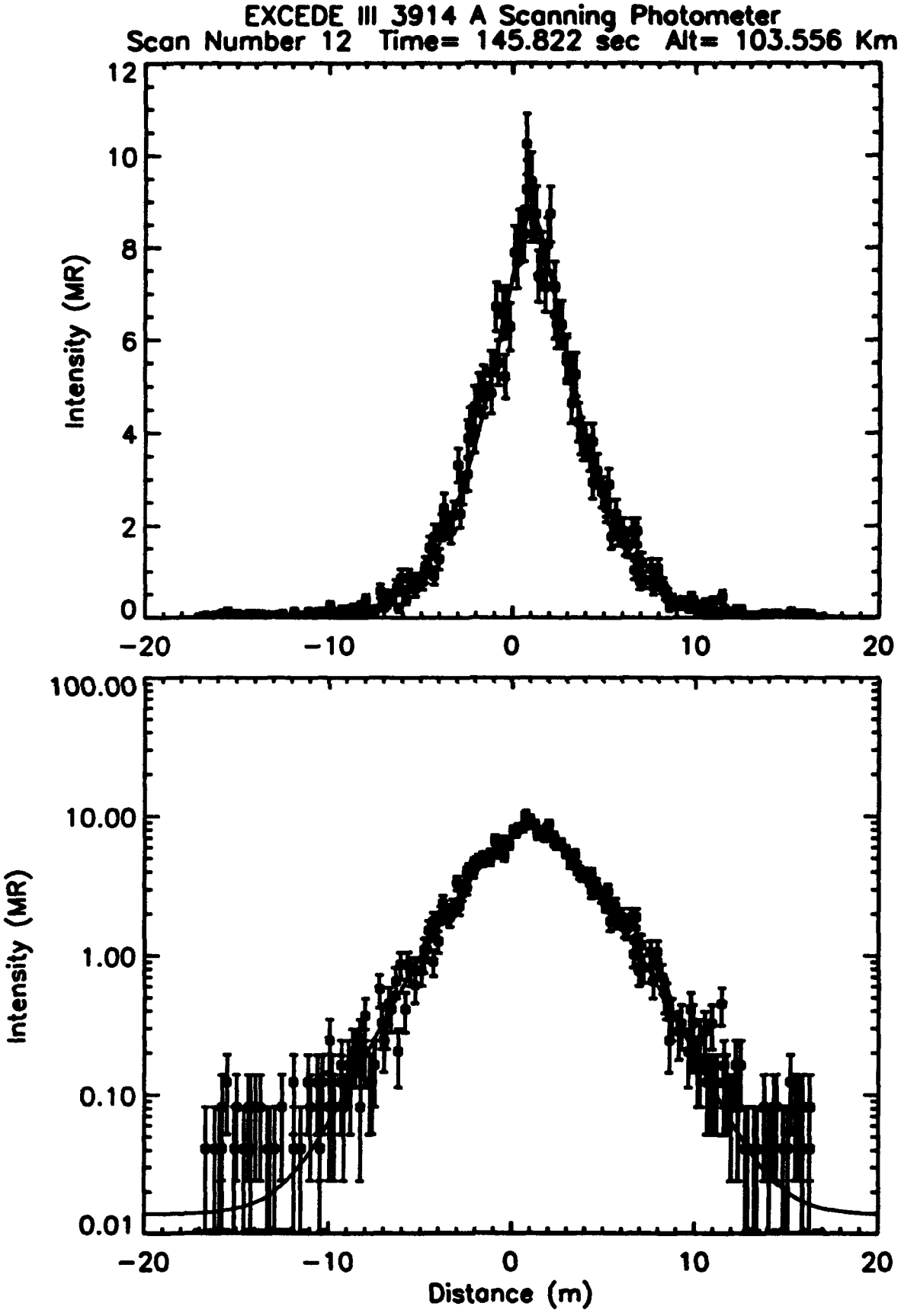

EXCEDE III 3914 A Scanning Photometer
Scan Number 7 Time= 140.805 sec Alt= 101.102 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

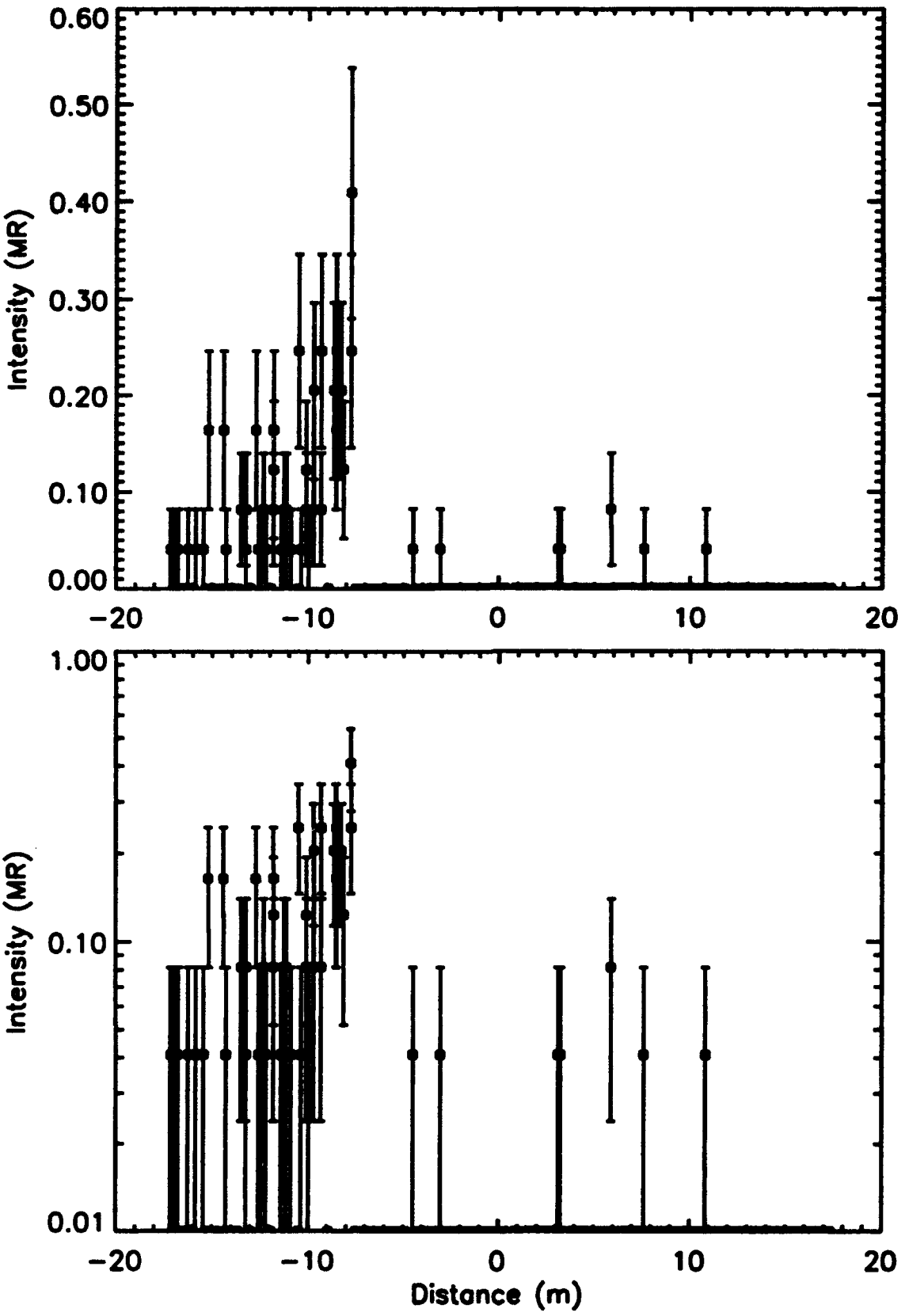

EXCEDE III 3914 A Scanning Photometer
Scan Number 8 Time= 141.904 sec Alt= 101.660 Km
Intensity (MR)
15
10
5
0
−20
−10
0
10
20
Intensity (MR)
100.00
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

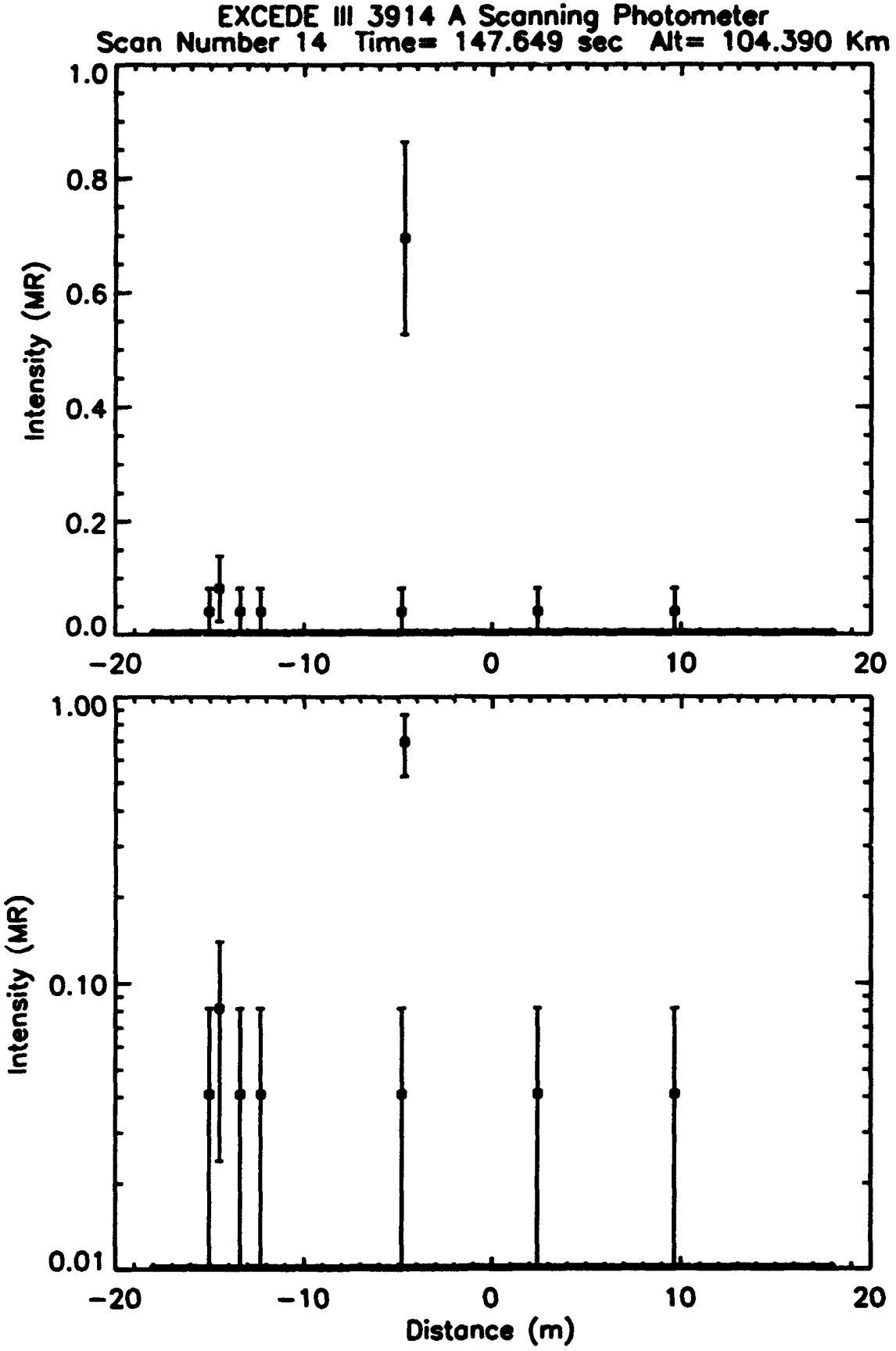

EXCEDE III 3914 A Scanning Photometer
Scan Number 9 Time= 142.641 sec Alt= 102.027 Km
Intensity (MR)
14
12
10
8
6
4
2
0
−20
−10
0
10
20
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

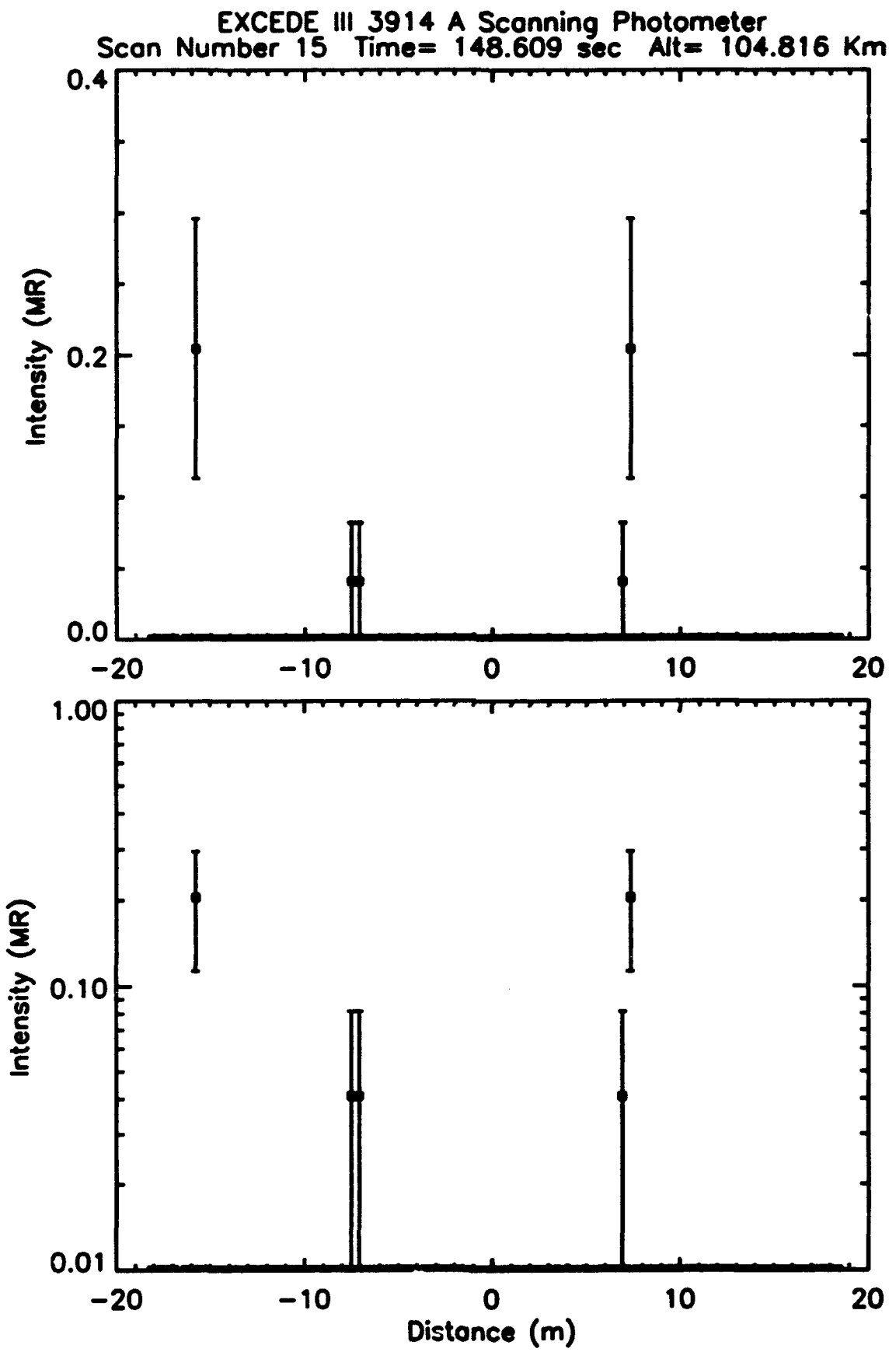

EXCEDE III 3914 A Scanning Photometer
Scan Number 10 Time= 143.862 sec Alt= 102.625 Km
Intensity (MR)
12
10
8
6
4
2
0
−20
−10
0
10
20
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

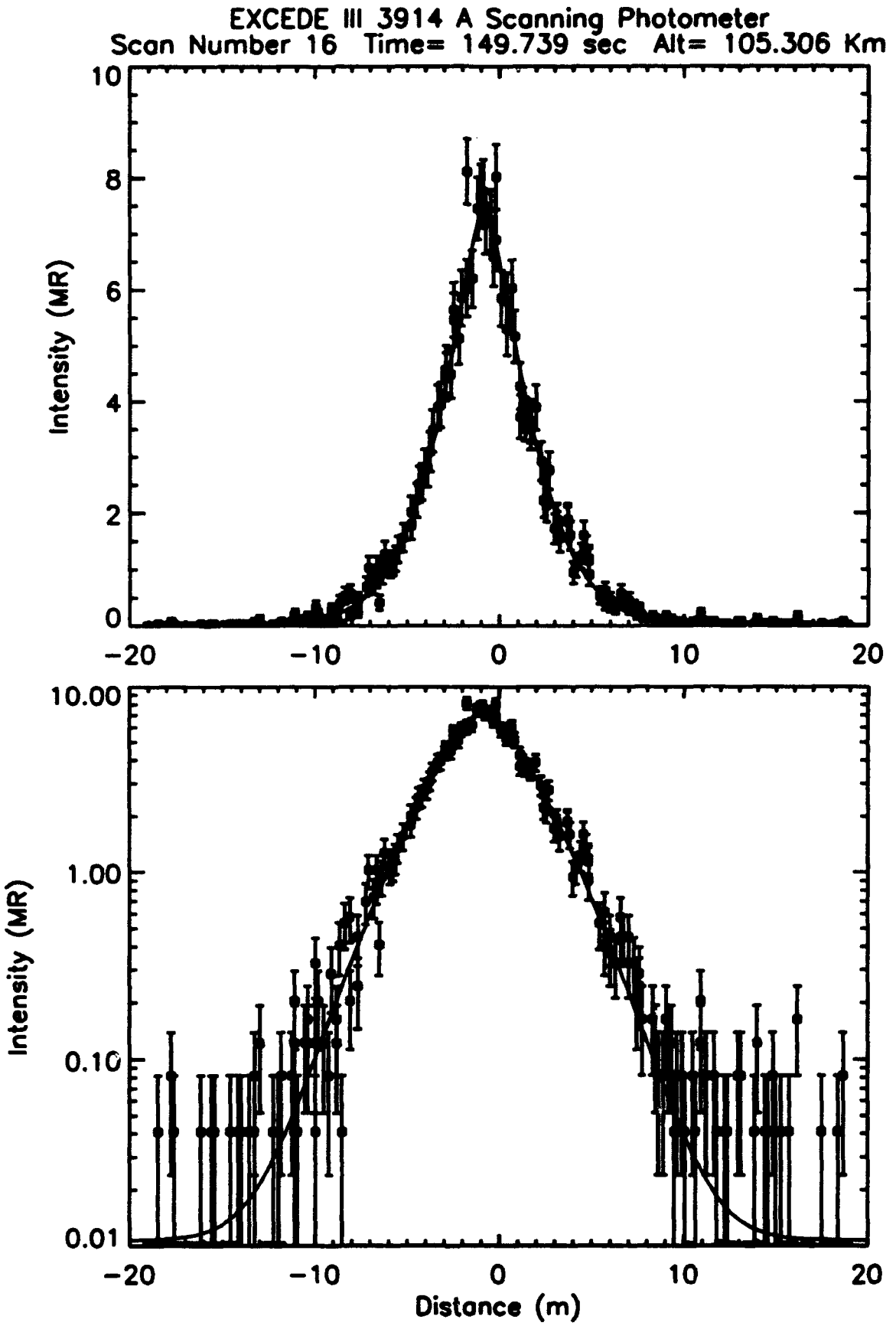

EXCEDE III 3914 A Scanning Photometer
Scan Number 11 Time= 144.583 sec Alt= 102.972 Km
Intensity (MR)
12
10
8
6
4
2
0
-20
-10
0
10
20
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

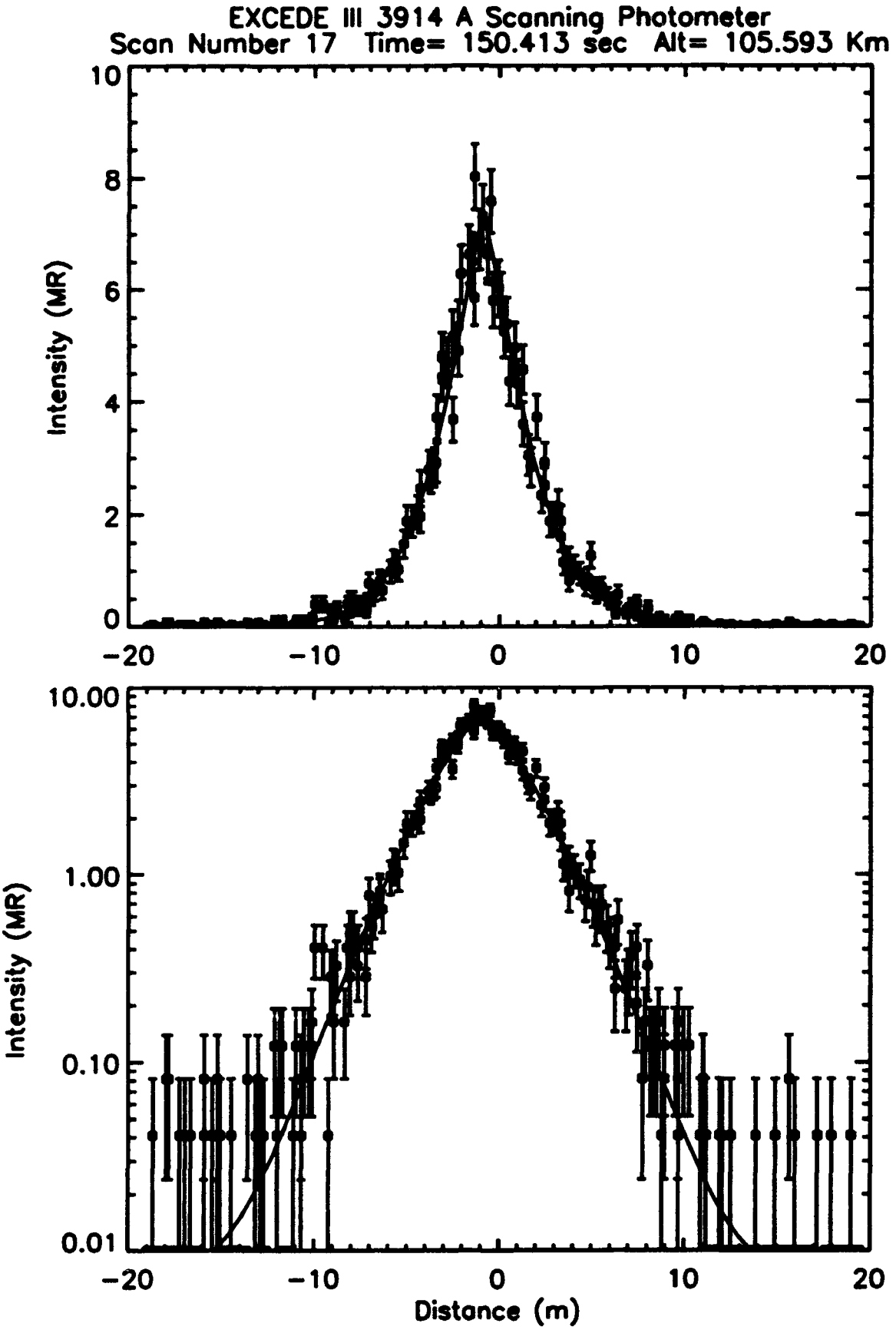

EXCEDE III 3914 A Scanning Photometer
Scan Number 12 Time= 145.822 sec Alt= 103.556 Km
Intensity (MR)
12
10
8
6
4
2
0
−20
−10
0
10
20
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

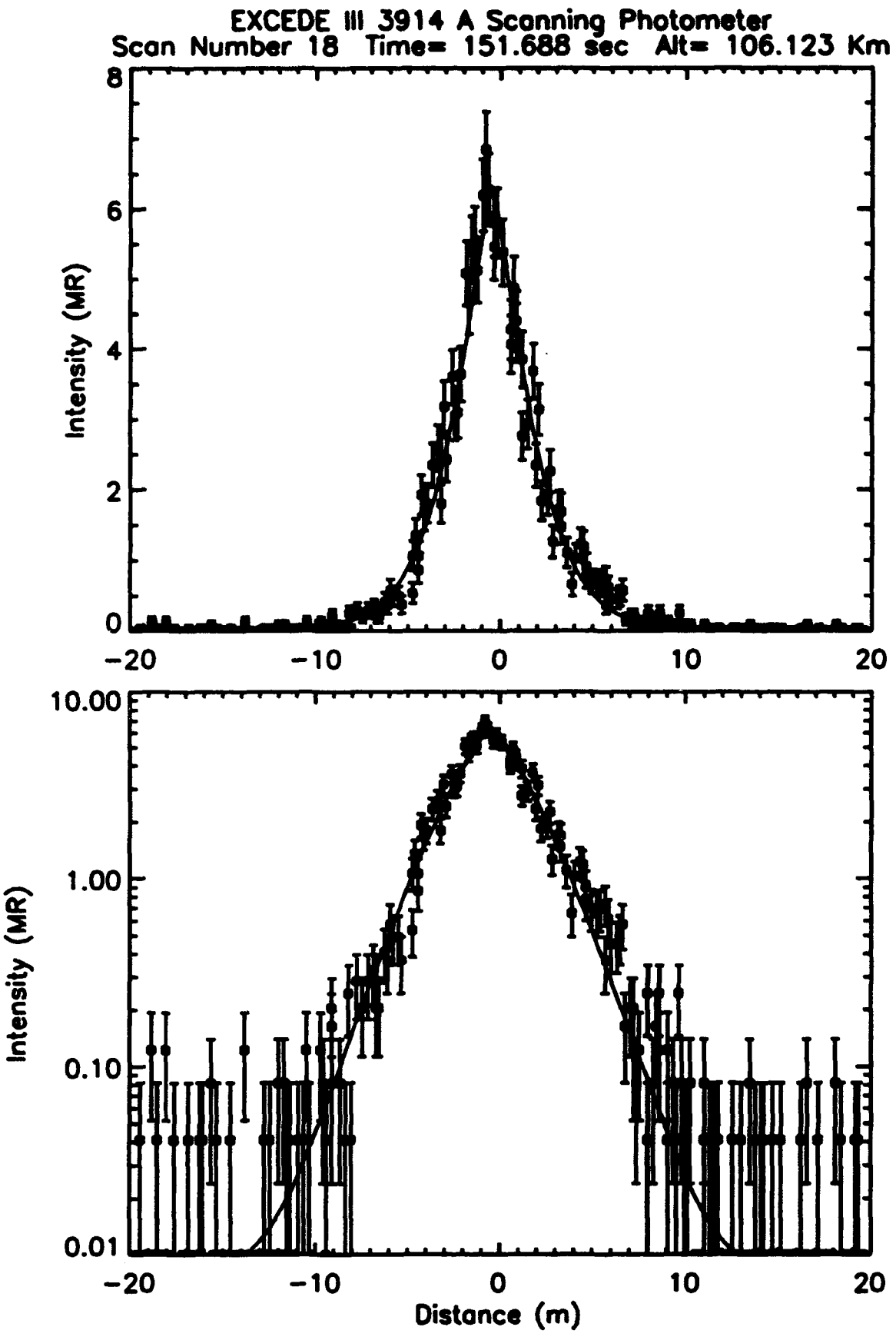

EXCEDE III 3914 A Scanning Photometer
Scan Number 13 Time= 146.657 sec Alt= 103.941 Km
Intensity (MR)
0.60
0.50
0.40
0.30
0.20
0.10
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

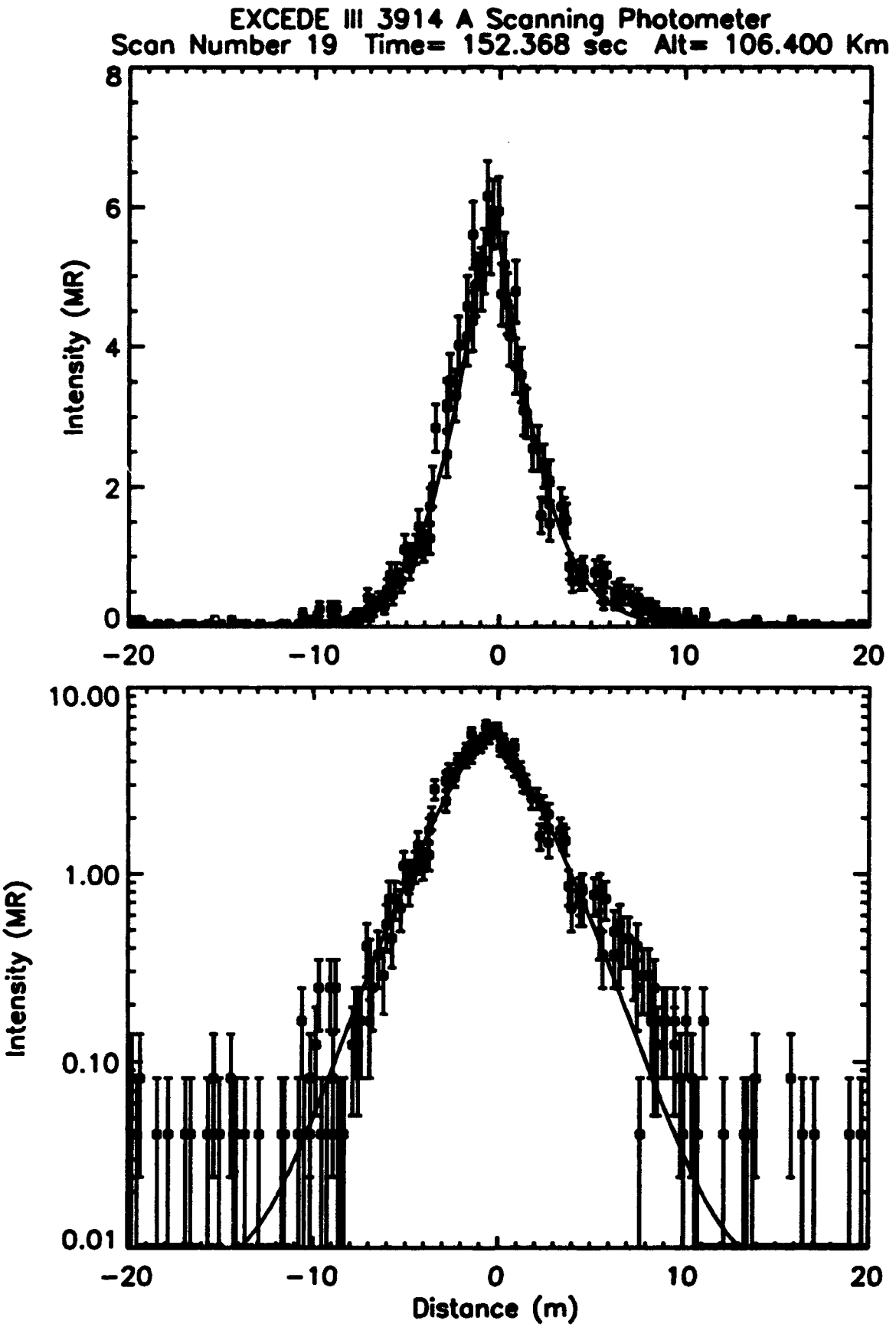

EXCEDE III 3914 A Scanning Photometer
Scan Number 14 Time= 147.649 sec Alt= 104.390 Km
Intensity (MR)
1.0
0.8
0.6
0.4
0.2
0.0
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

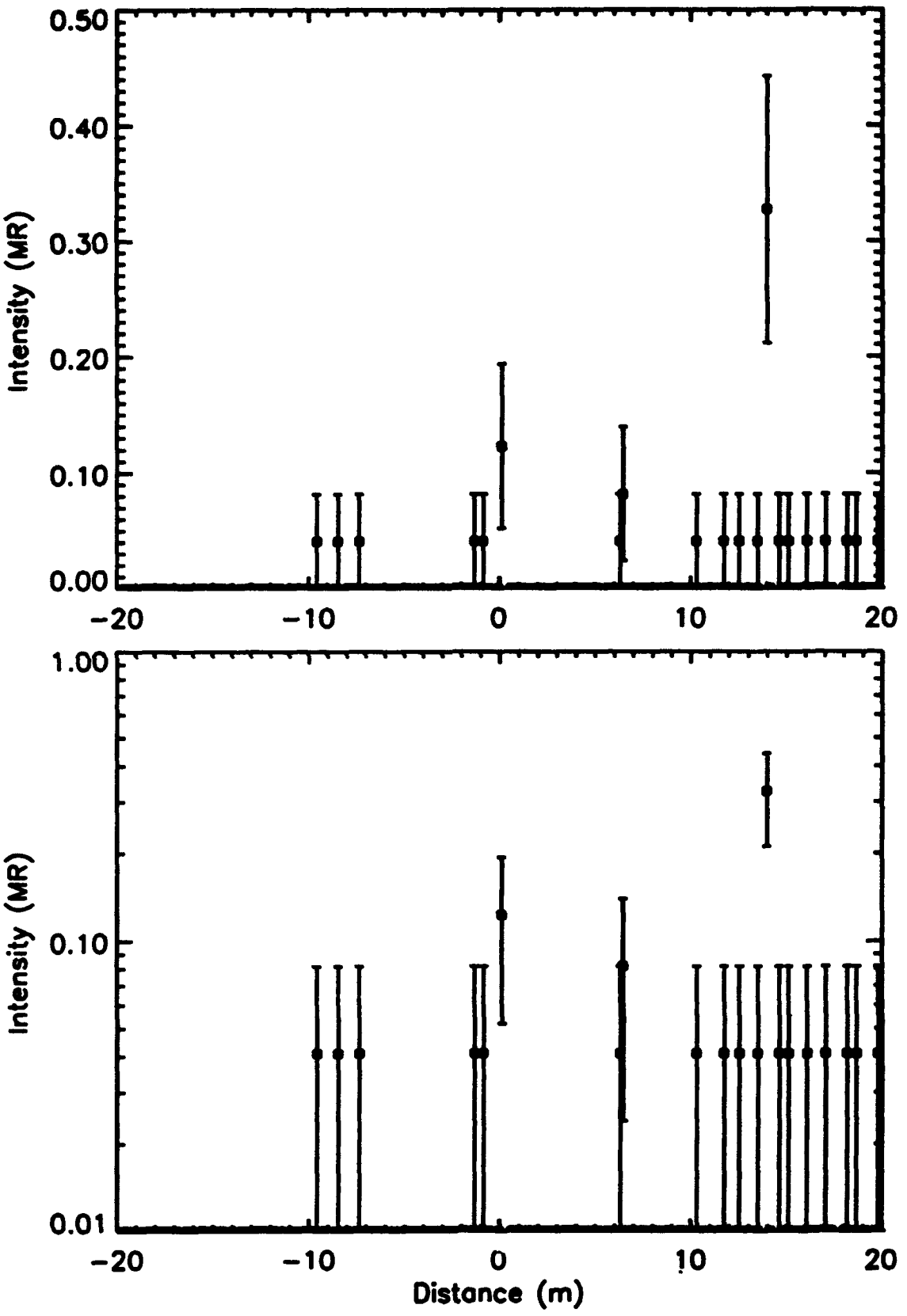

EXCEDE III 3914 A Scanning Photometer
Scan Number 15 Time= 148.609 sec Alt= 104.816 Km
0.4
0.2
0.0
Intensity (MR)
−20
−10
0
10
20
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

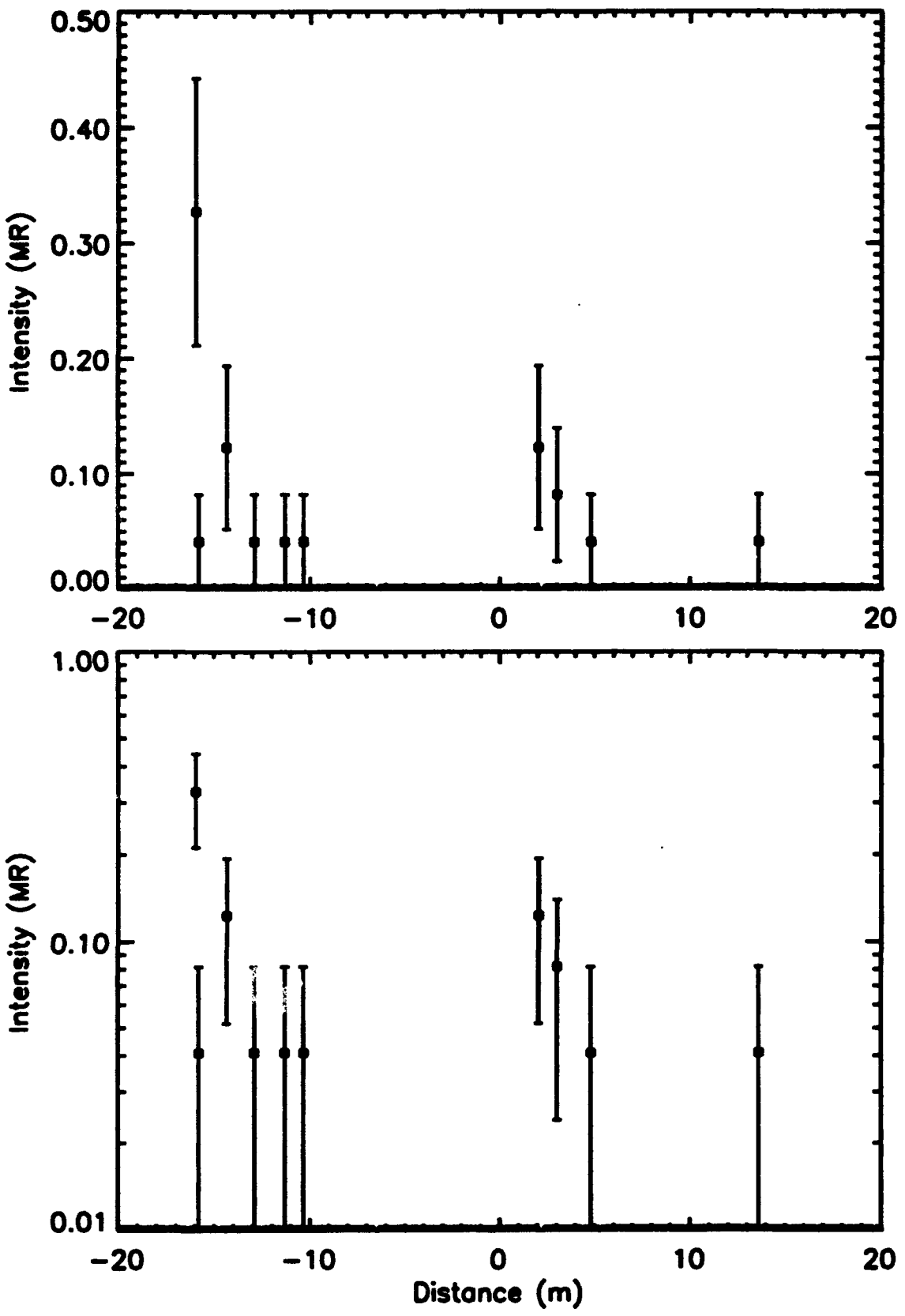

EXCEDE III 3914 A Scanning Photometer
Scan Number 16 Time= 149.739 sec Alt= 105.306 Km
Intensity (MR)
10
8
6
4
2
0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

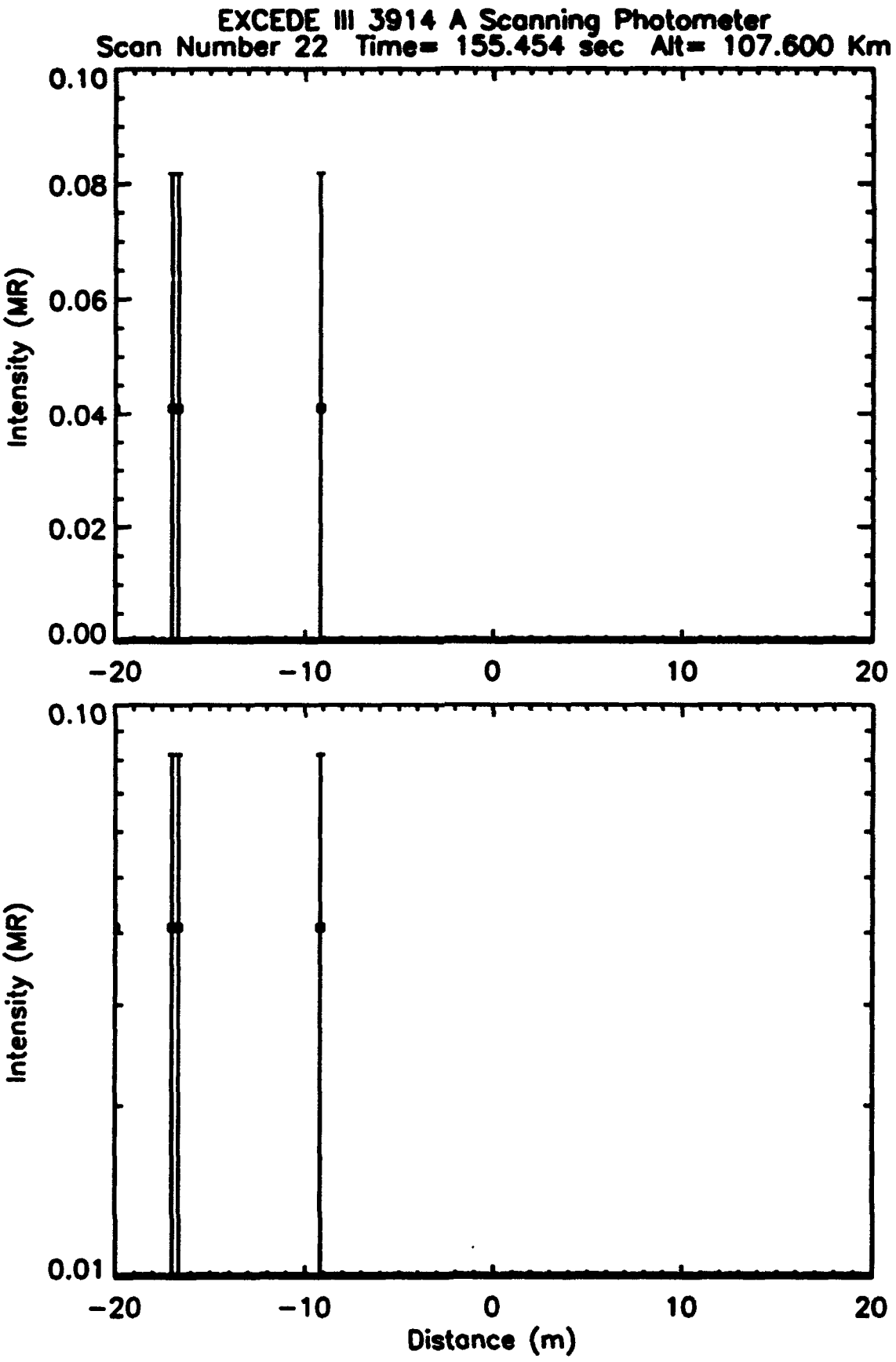

EXCEDE III 3914 A Scanning Photometer
Scan Number 17 Time= 150.413 sec Alt= 105.593 Km
Intensity (MR)
10
8
6
4
2
0
-20
-10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
-20
-10
0
10
20
Distance (m)

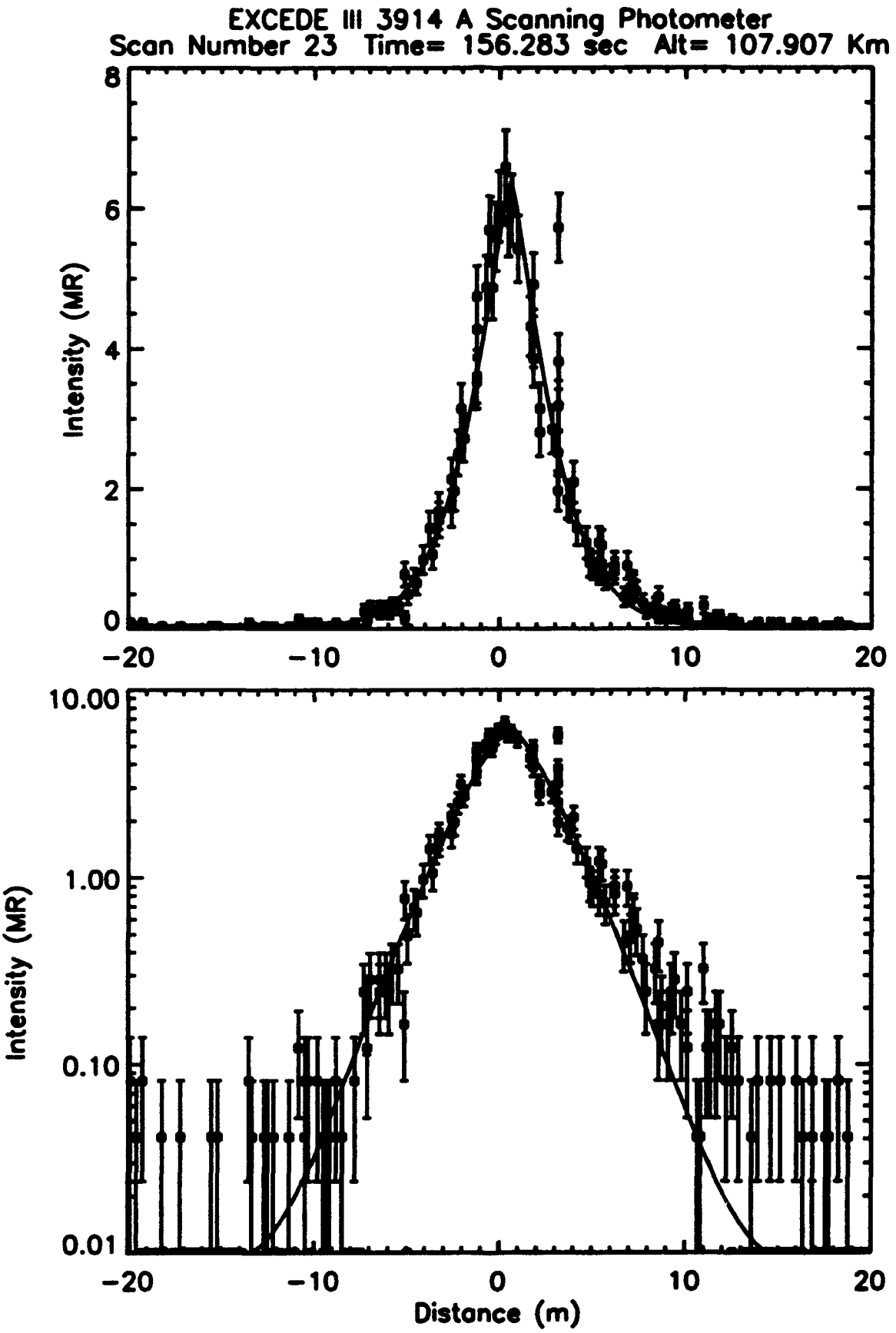

EXCEDE III 3914 A Scanning Photometer
Scan Number 18 Time= 151.688 sec Alt= 106.123 Km
Intensity (MR)
8
6
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

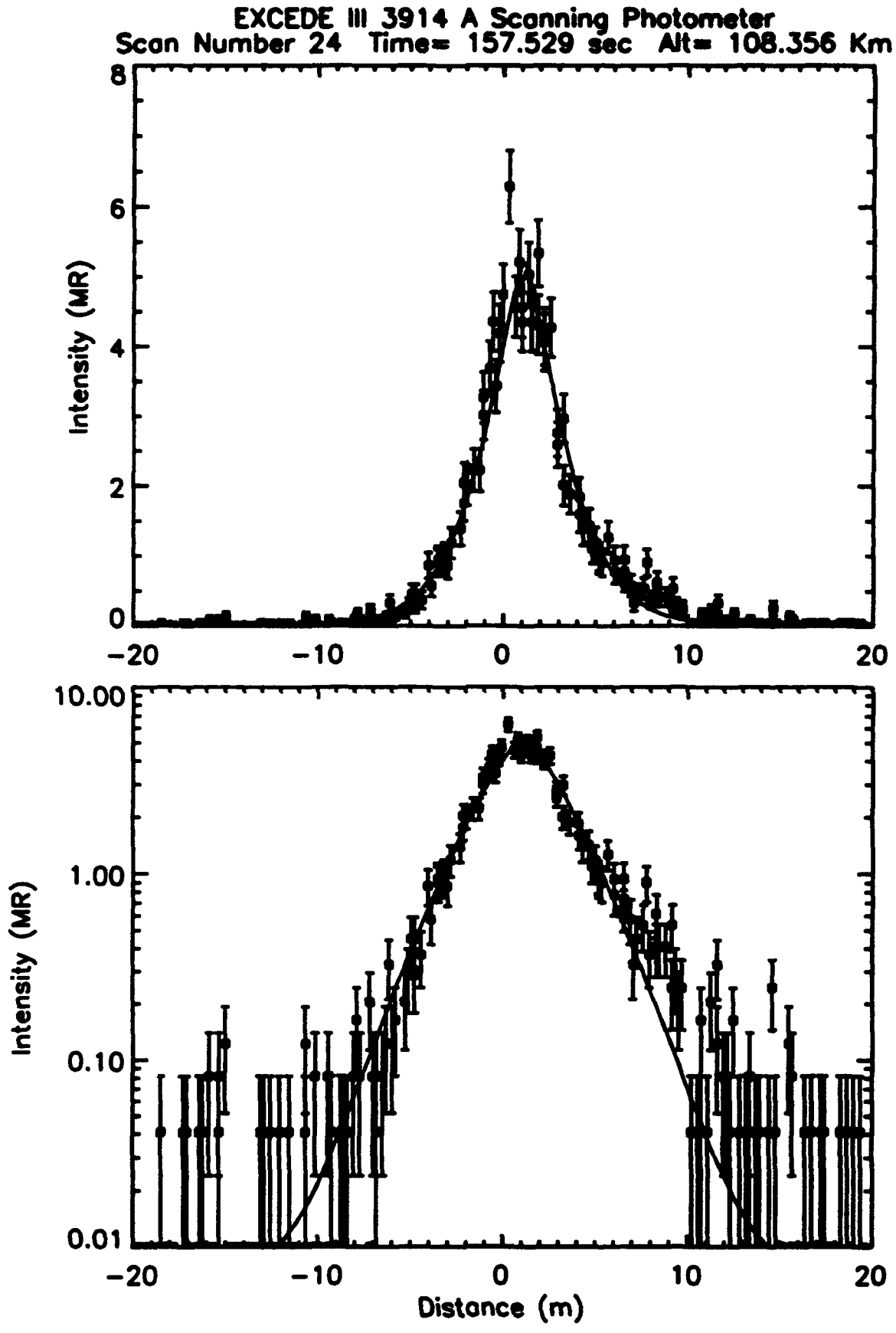

EXCEDE III 3914 A Scanning Photometer
Scan Number 19 Time= 152.368 sec Alt= 106.400 Km
Intensity (MR)
8
6
4
2
0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

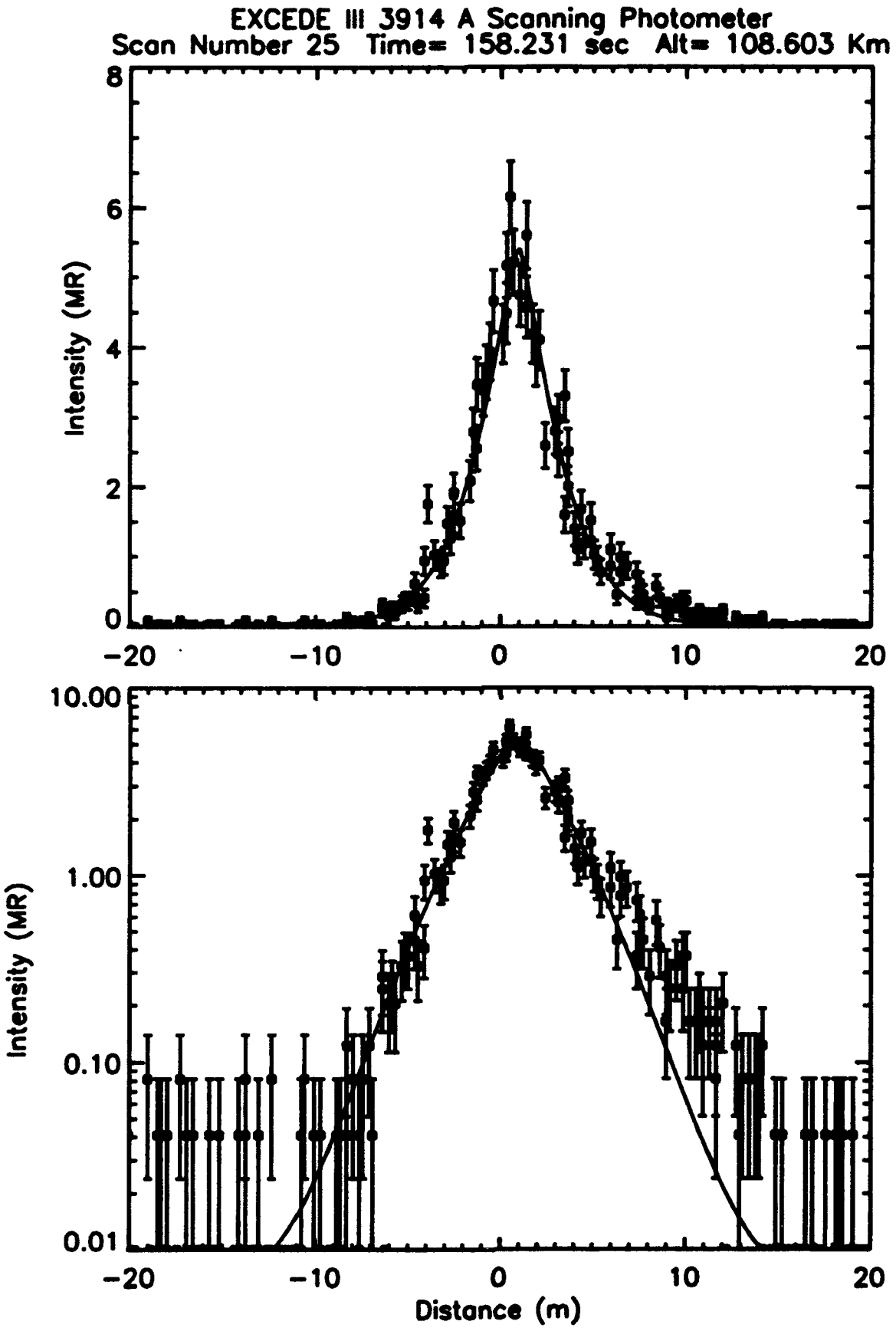

EXCEDE III 3914 A Scanning Photometer
Scan Number 20 Time= 153.502 sec Alt= 106.851 Km
Intensity (MR)
0.50
0.40
0.30
0.20
0.10
0.00
-20
-10
0
10
20
Intensity (MR)
1.00
0.10
0.01
-20
-10
0
10
20
Distance (m)

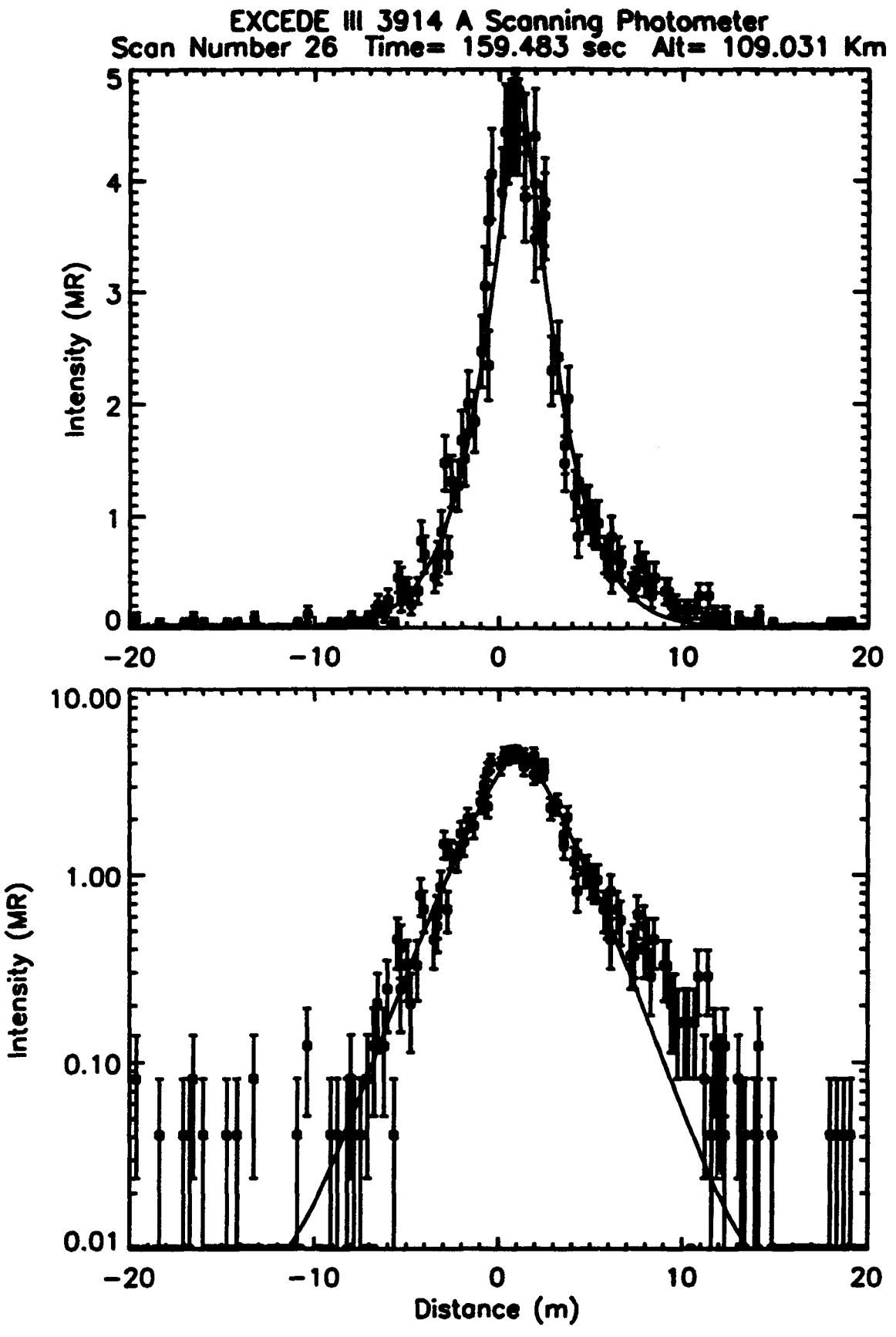

EXCEDE III 3914 A Scanning Photometer
Scan Number 21 Time= 154.460 sec Alt= 107.223 Km
Intensity (MR)
0.50
0.40
0.30
0.20
0.10
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

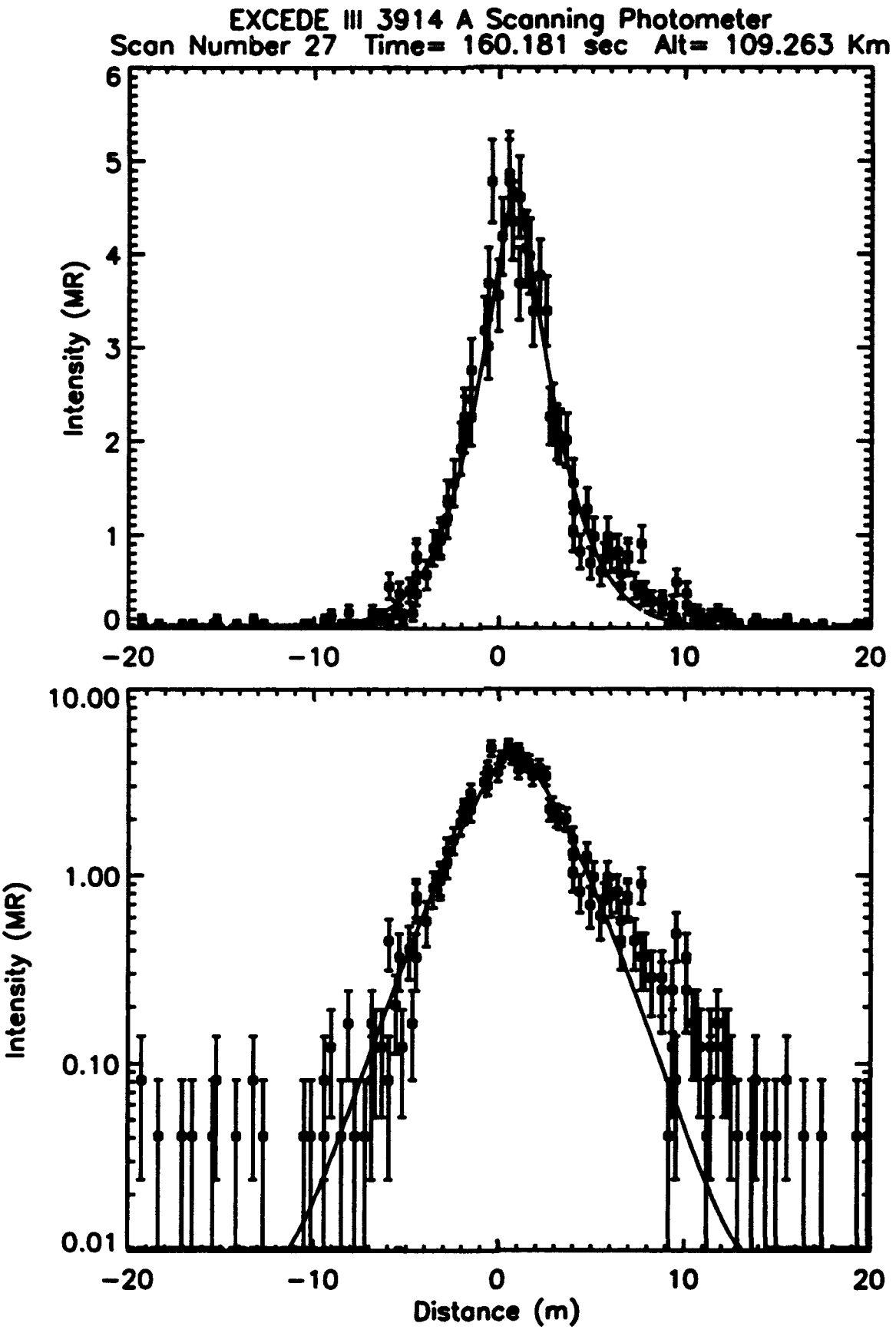

EXCEDE III 3914 A Scanning Photometer
Scan Number 22 Time= 155.454 sec Alt= 107.600 Km
0.10
0.08
0.06
0.04
0.02
0.00
Intensity (MR)
−20
−10
0
10
20
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

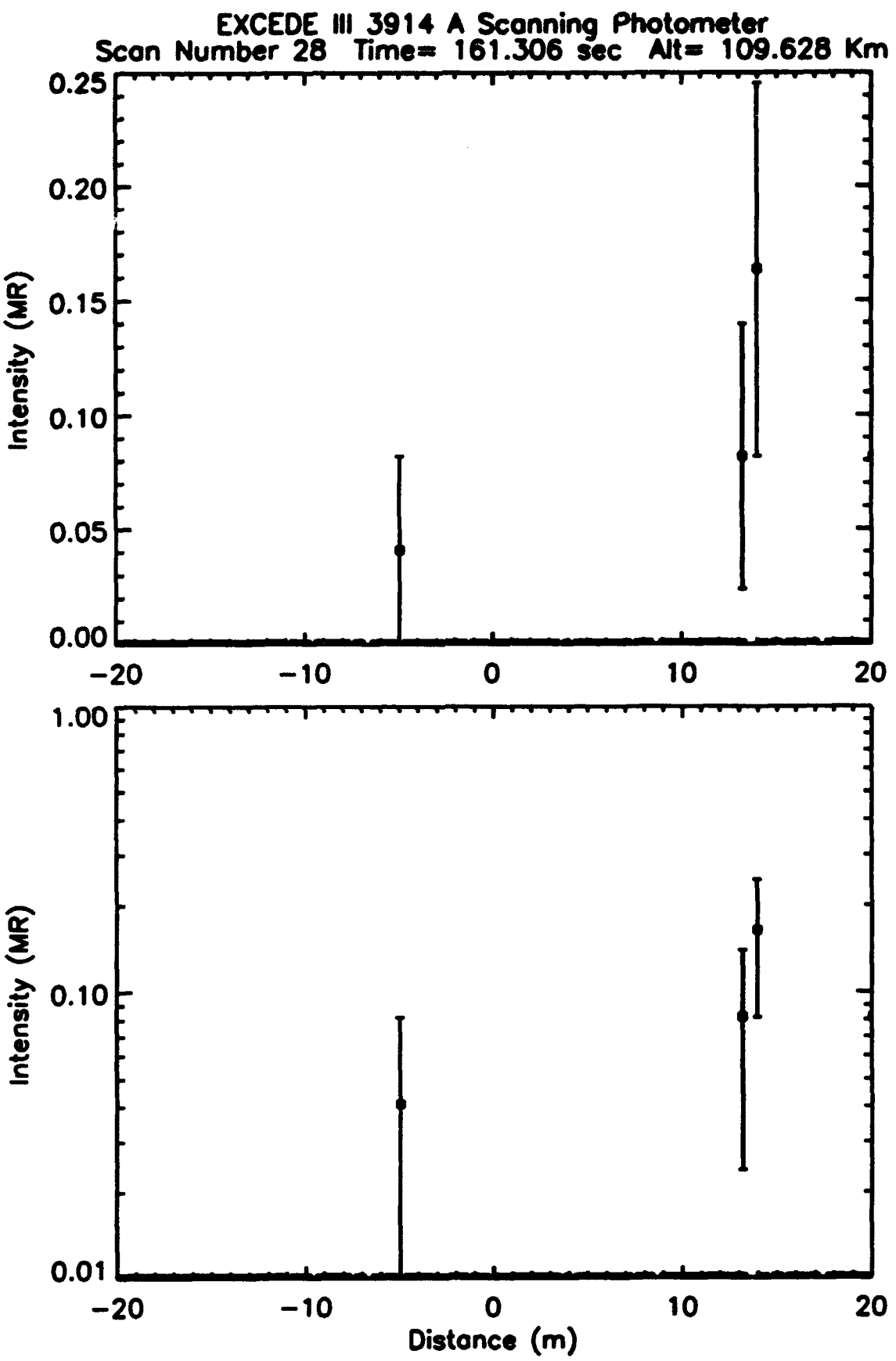

EXCEDE III 3914 A Scanning Photometer
Scan Number 23 Time= 156.283 sec Alt= 107.907 Km
Intensity (MR)
8
6
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

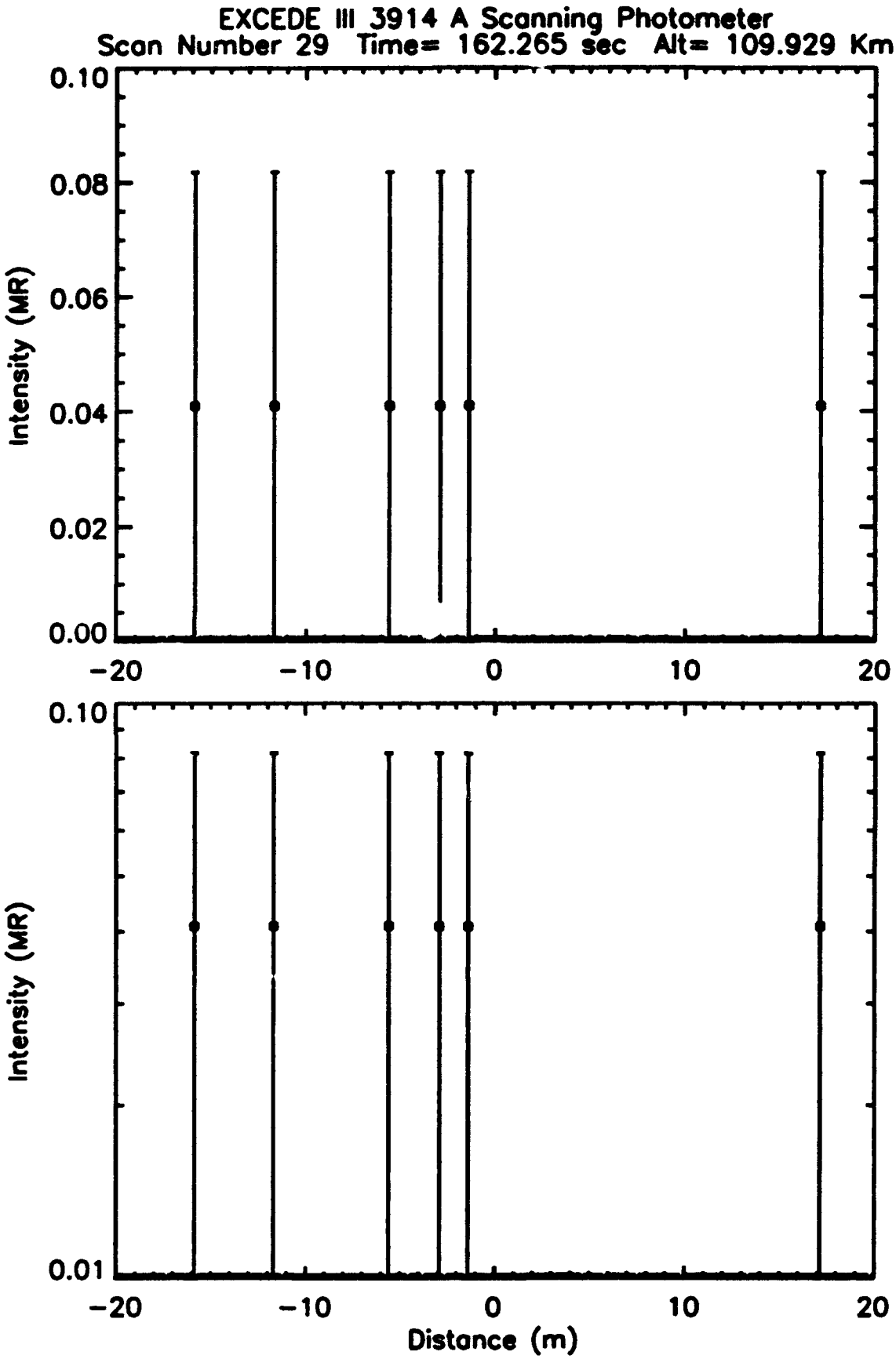

EXCEDE III 3914 A Scanning Photometer
Scan Number 24 Time= 157.529 sec Alt= 108.356 Km
Intensity (MR)
8
6
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

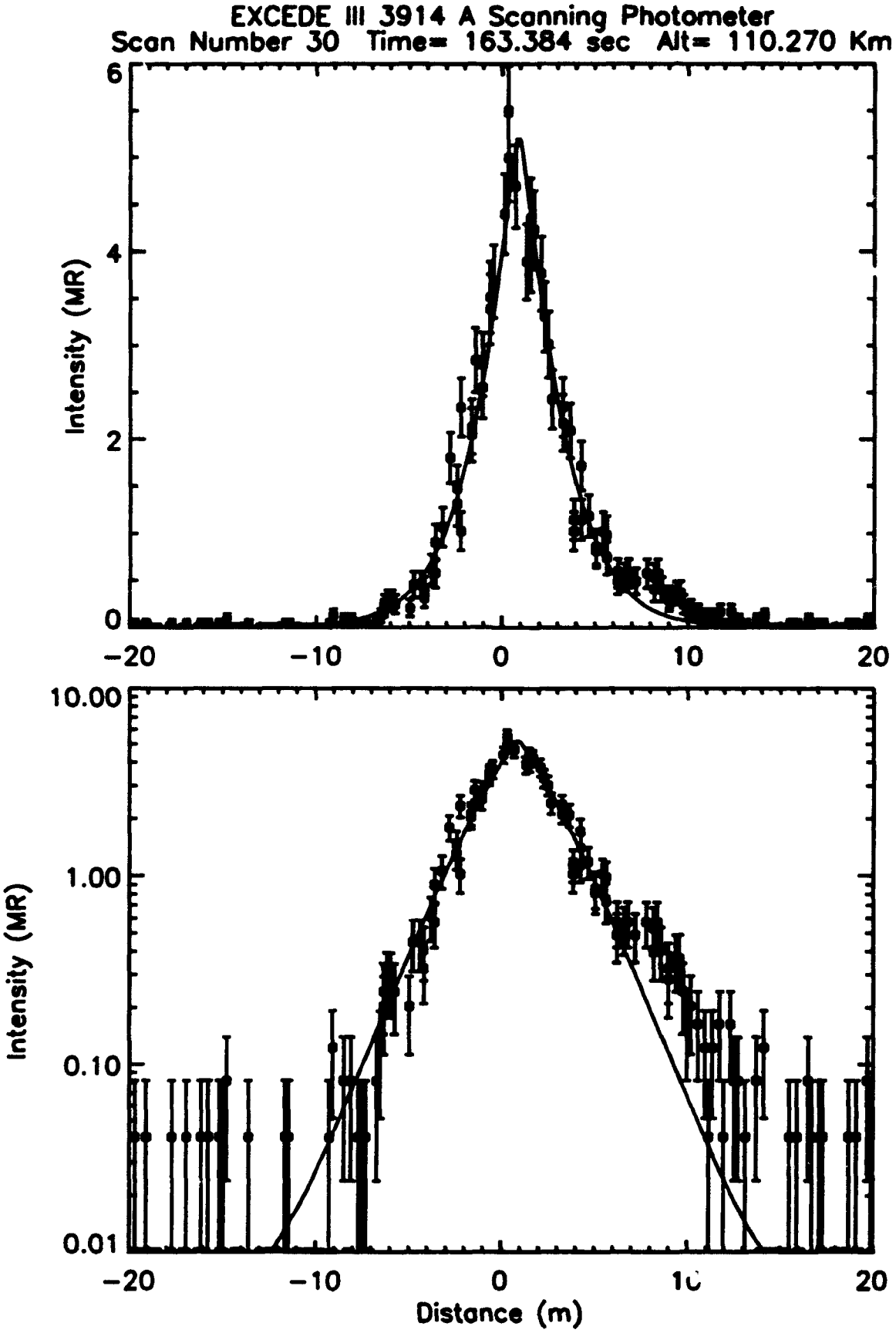

EXCEDE III 3914 A Scanning Photometer
Scan Number 25 Time= 158.231 sec Alt= 108.603 Km
Intensity (MR)
8
6
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

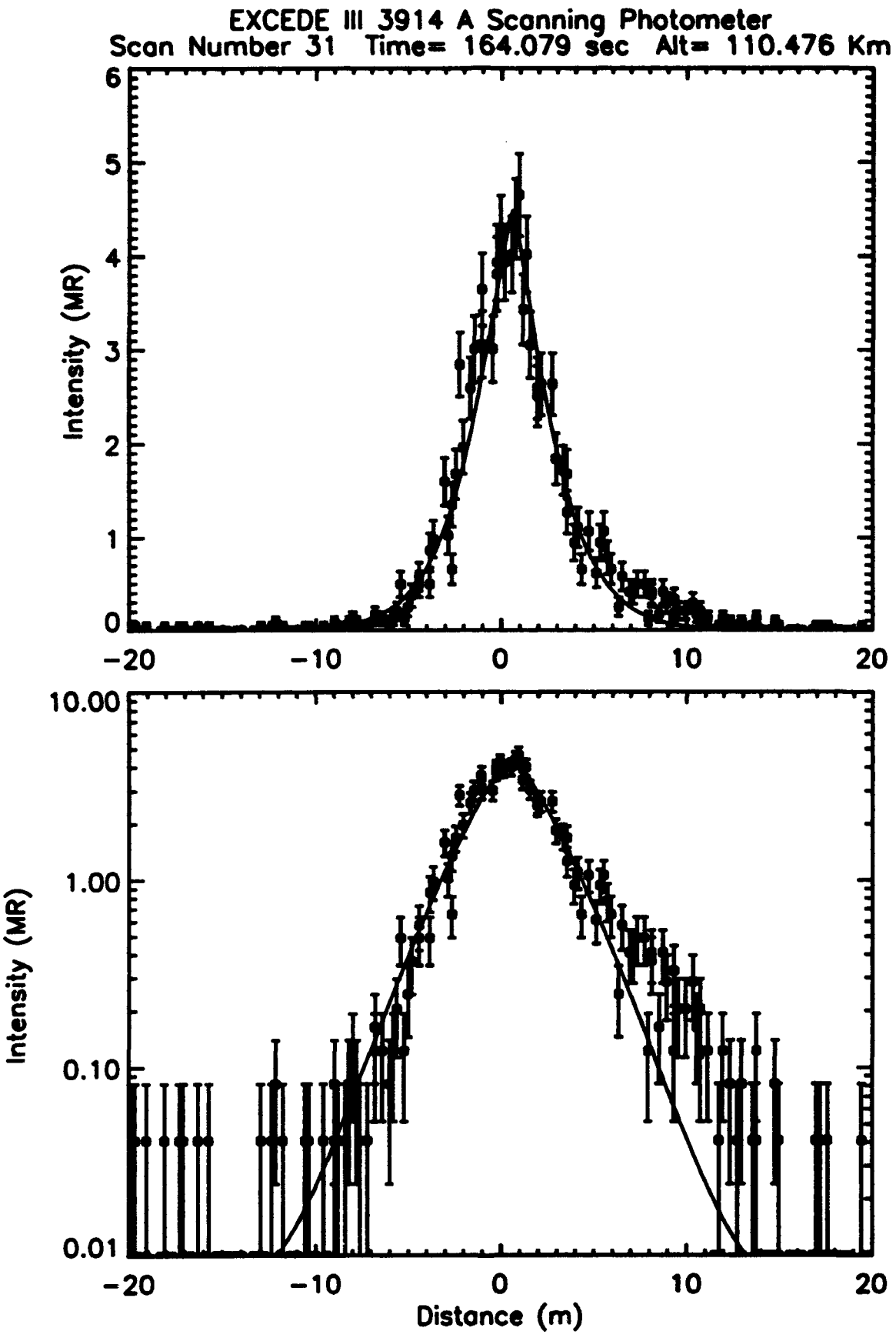

EXCEDE III 3914 A Scanning Photometer
Scan Number 26 Time= 159.483 sec Alt= 109.031 Km
Intensity (MR)
5
4
3
2
1
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

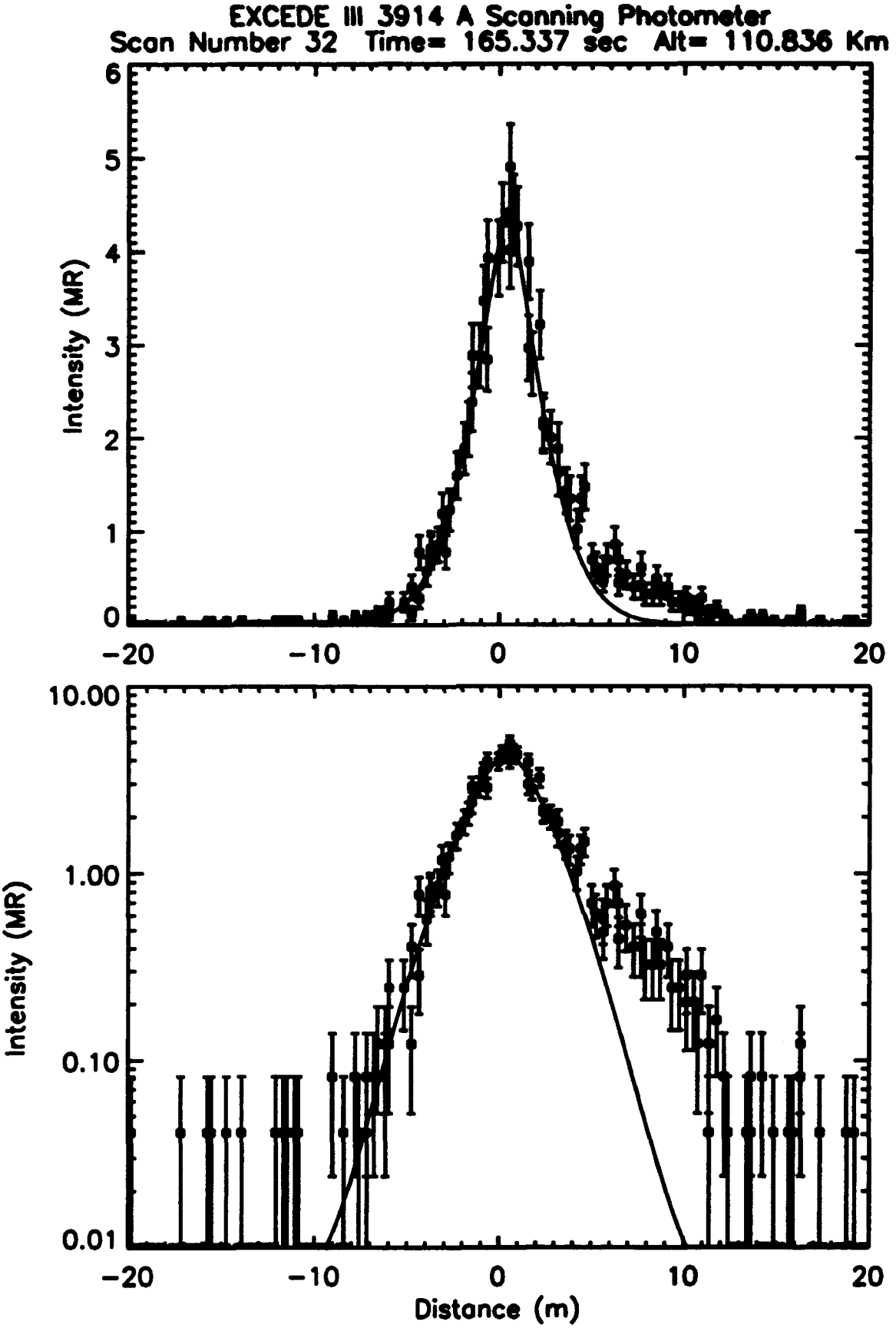

EXCEDE III 3914 A Scanning Photometer
Scan Number 27 Time= 160.181 sec Alt= 109.263 Km
Intensity (MR)
6
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

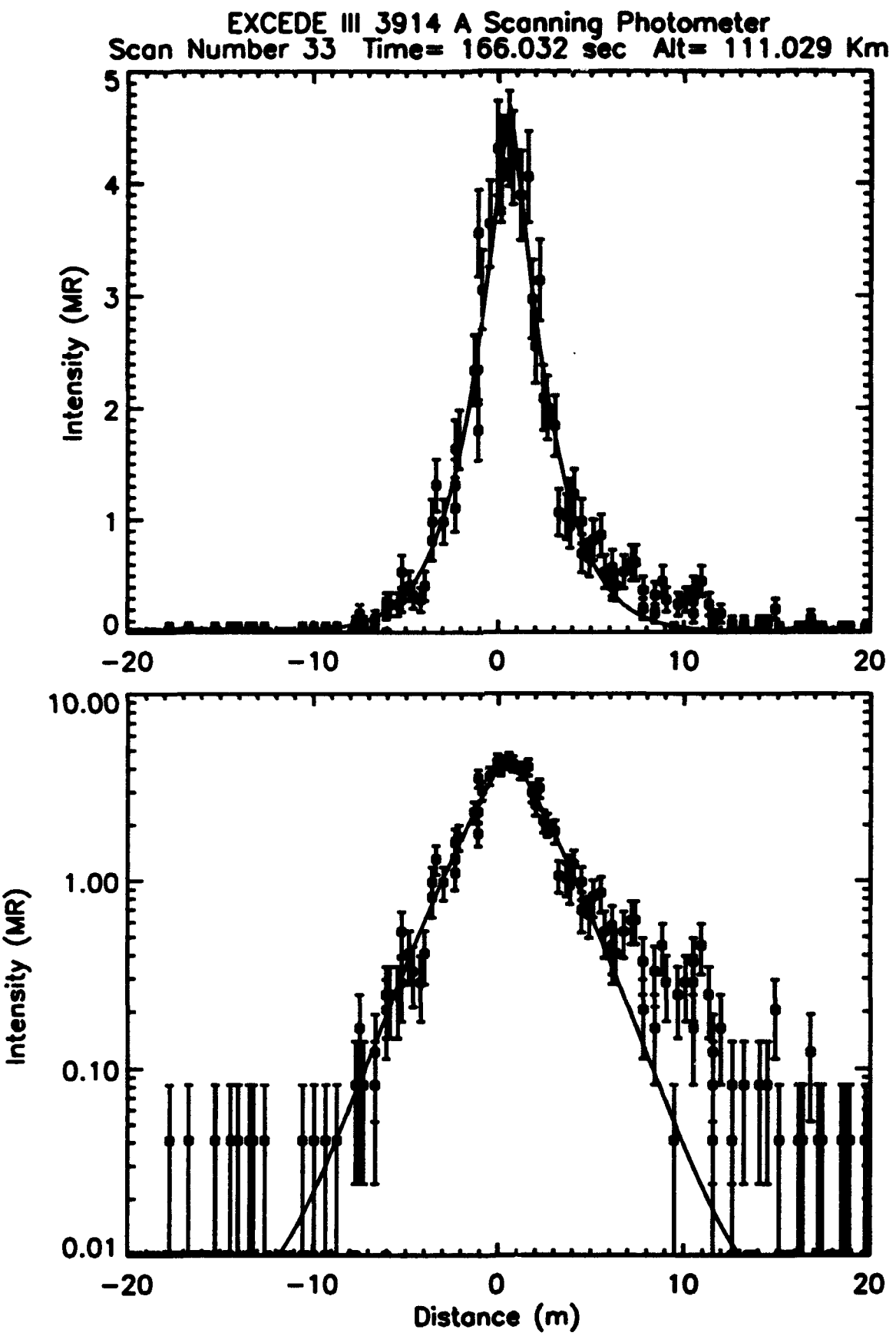

EXCEDE III 3914 A Scanning Photometer
Scan Number 28 Time= 161.306 sec Alt= 109.628 Km
Intensity (MR)
0.25
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

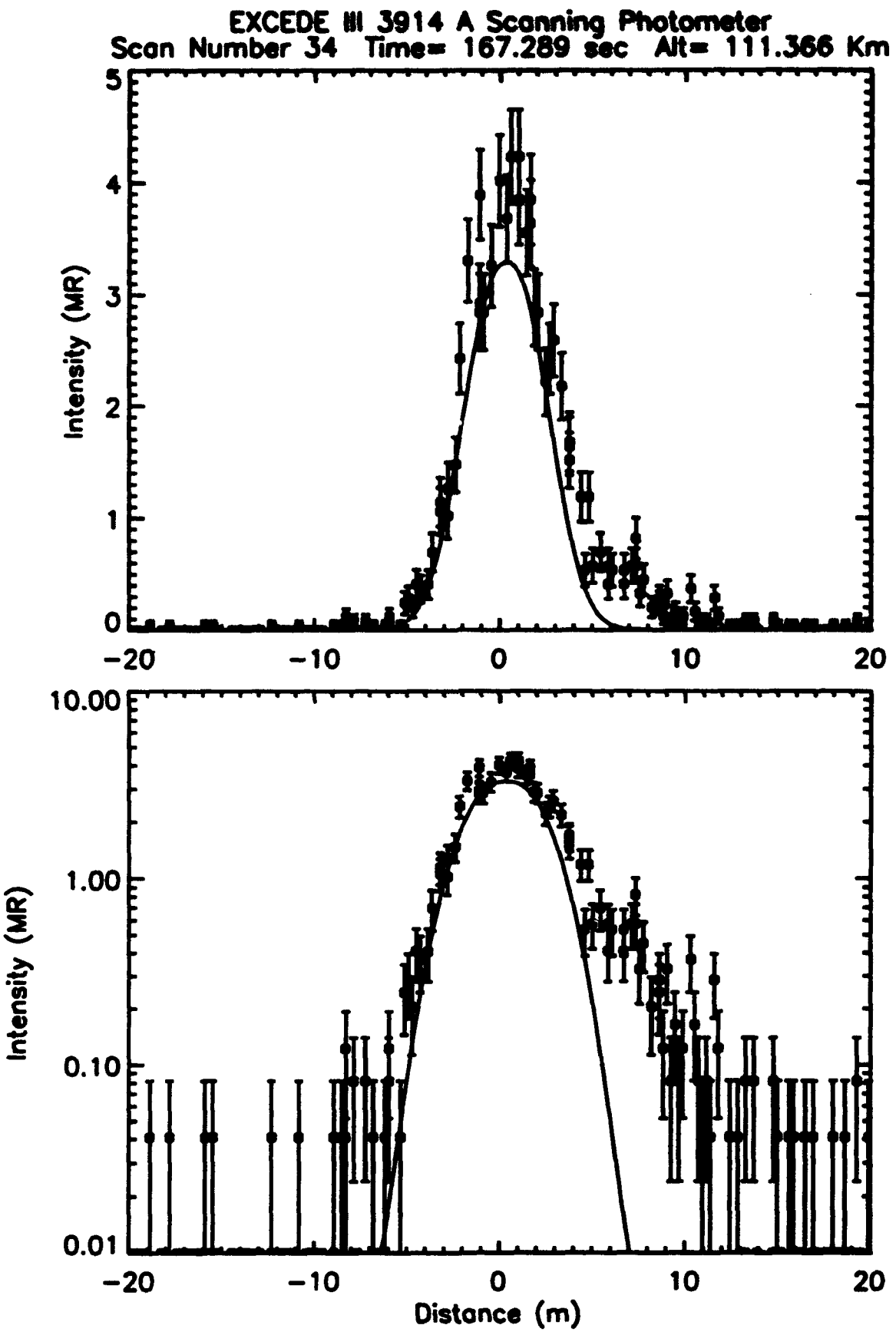

EXCEDE III 3914 A Scanning Photometer
Scan Number 29 Time= 162.265 sec Alt= 109.929 Km
Intensity (MR)
0.10
0.08
0.06
0.04
0.02
0.00
−20
−10
0
10
20
Intensity (MR)
0.10
0.01
−20
−10
0
10
20
Distance (m)

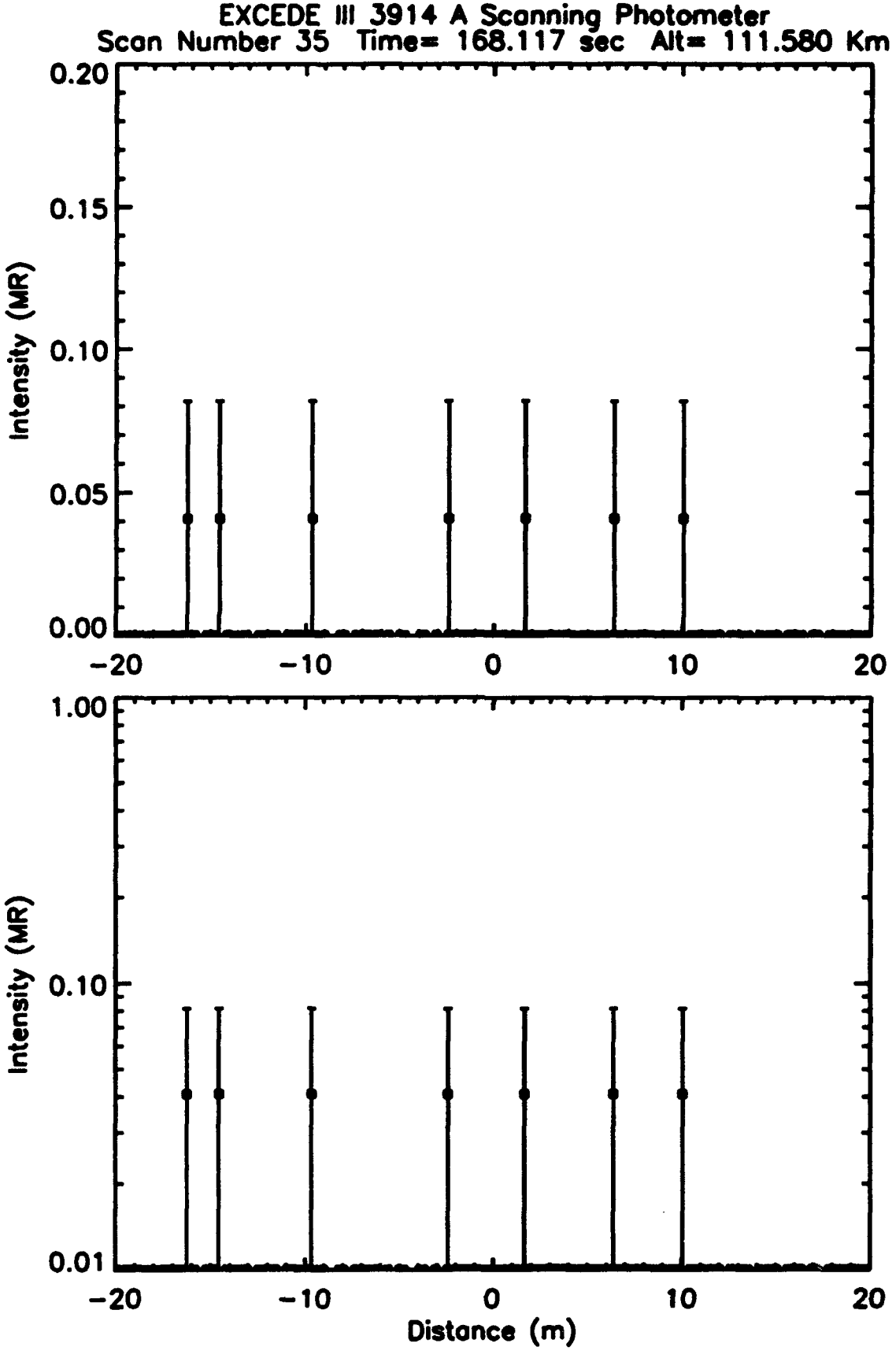

EXCEDE III 3914 A Scanning Photometer
Scan Number 30 Time= 163.384 sec Alt= 110.270 Km
Intensity (MR)
6
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
20
Distance (m)

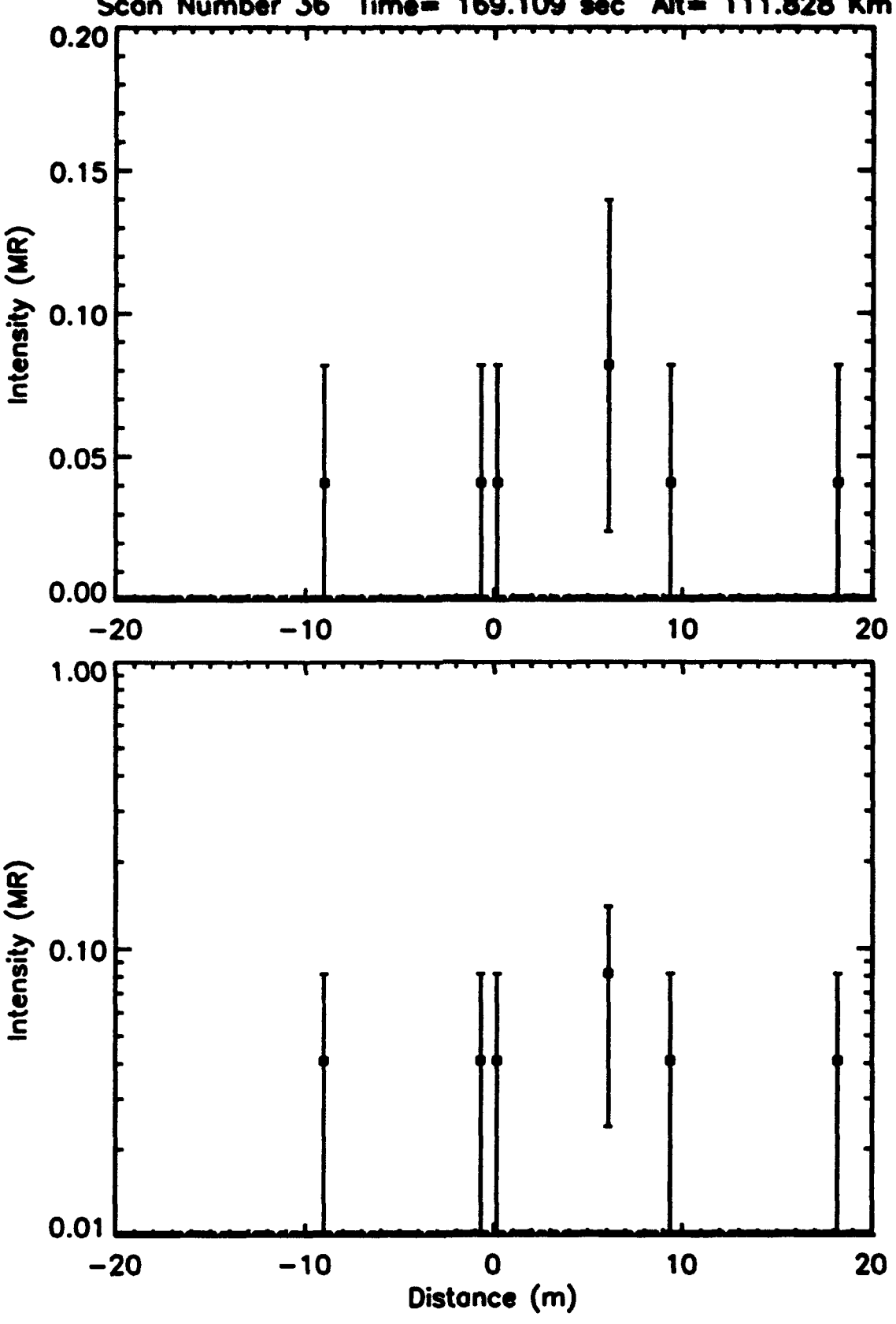

EXCEDE III 3914 A Scanning Photometer
Scan Number 31 Time= 164.079 sec Alt= 110.476 Km
Intensity (MR)
6
5
4
3
2
1
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

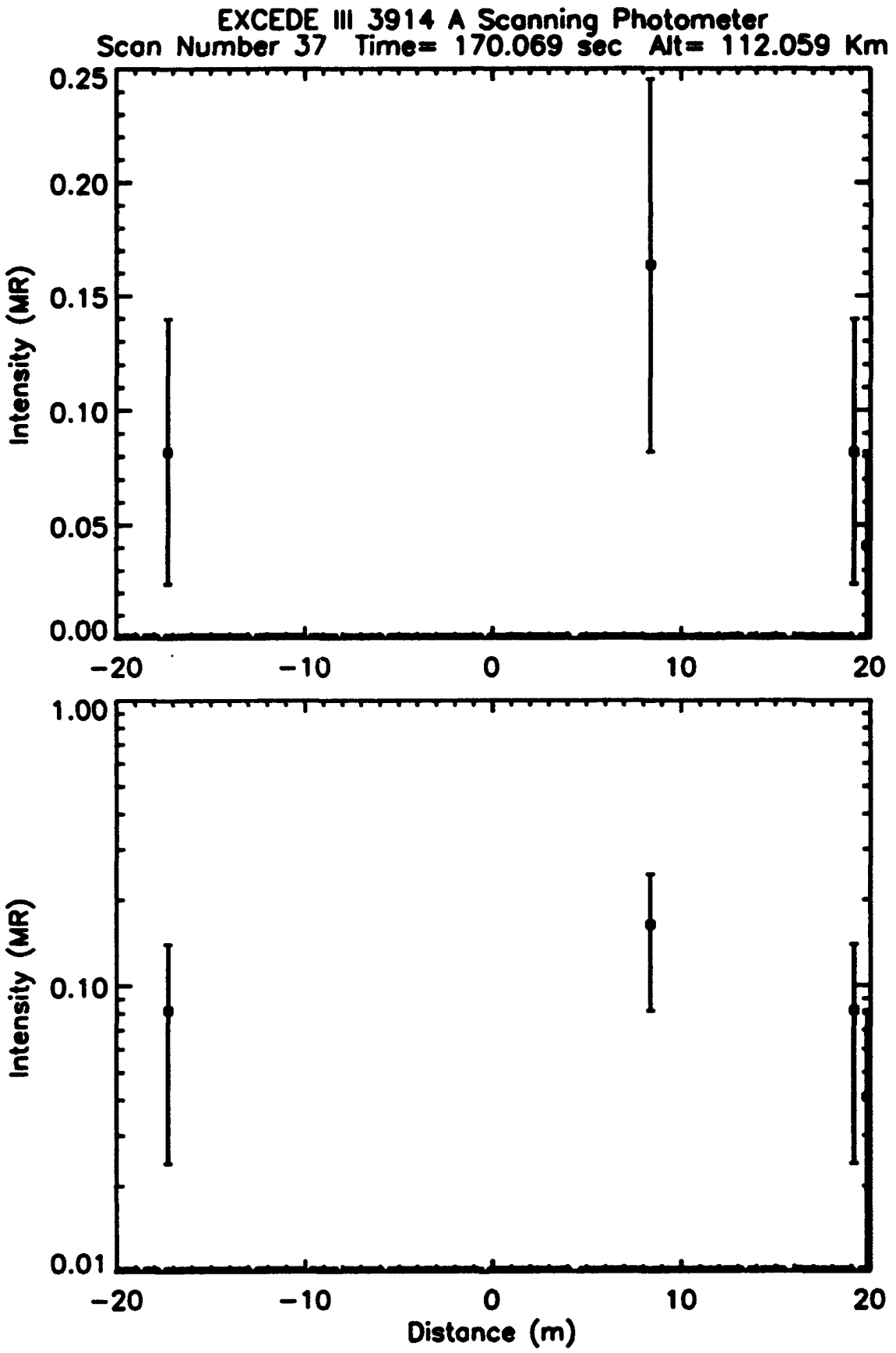

EXCEDE III 3914 A Scanning Photometer
Scan Number 32 Time= 165.337 sec Alt= 110.836 Km
Intensity (MR)
6
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

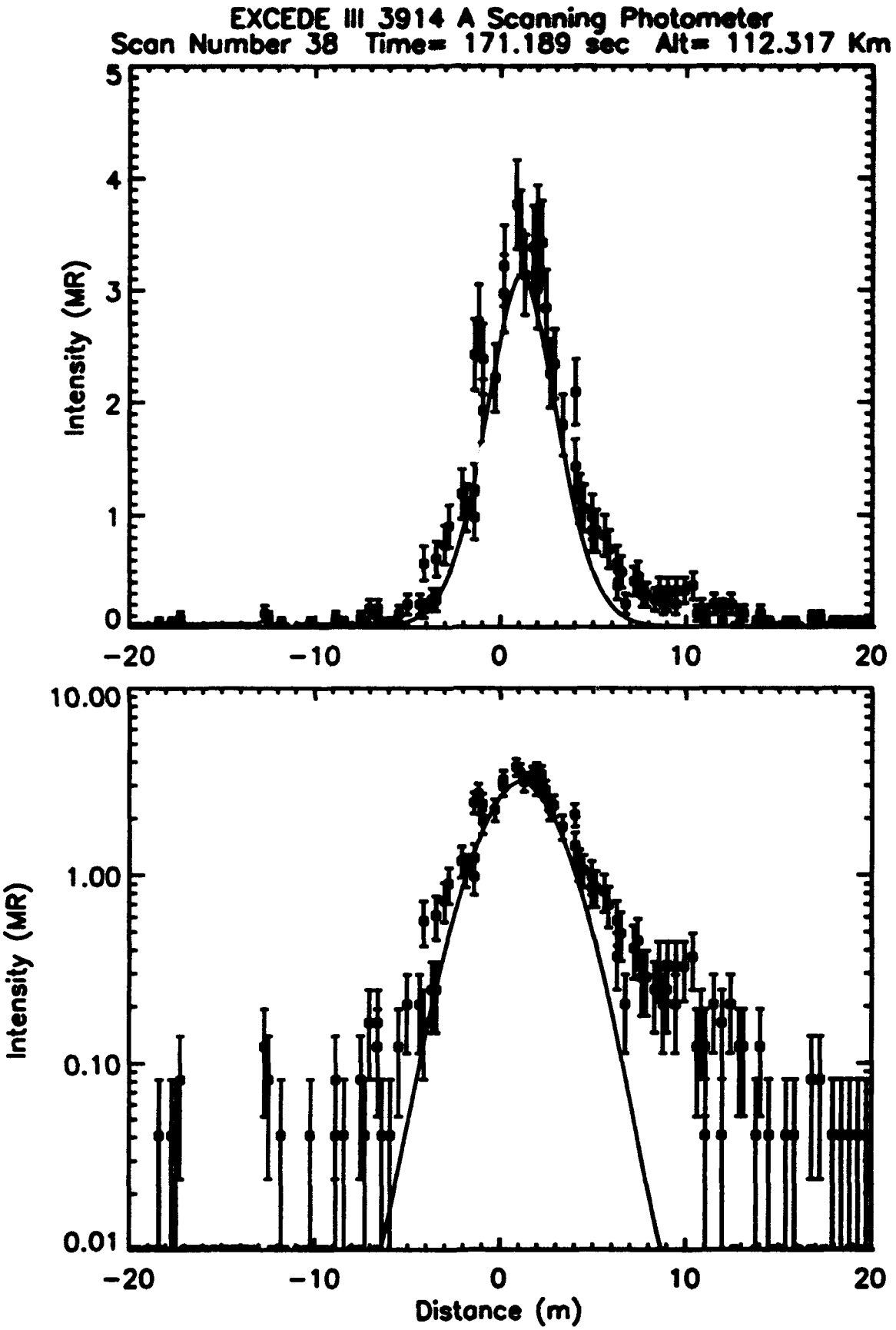

EXCEDE III 3914 A Scanning Photometer
Scan Number 33 Time= 166.032 sec Alt= 111.029 Km
Intensity (MR)
5
4
3
2
1
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

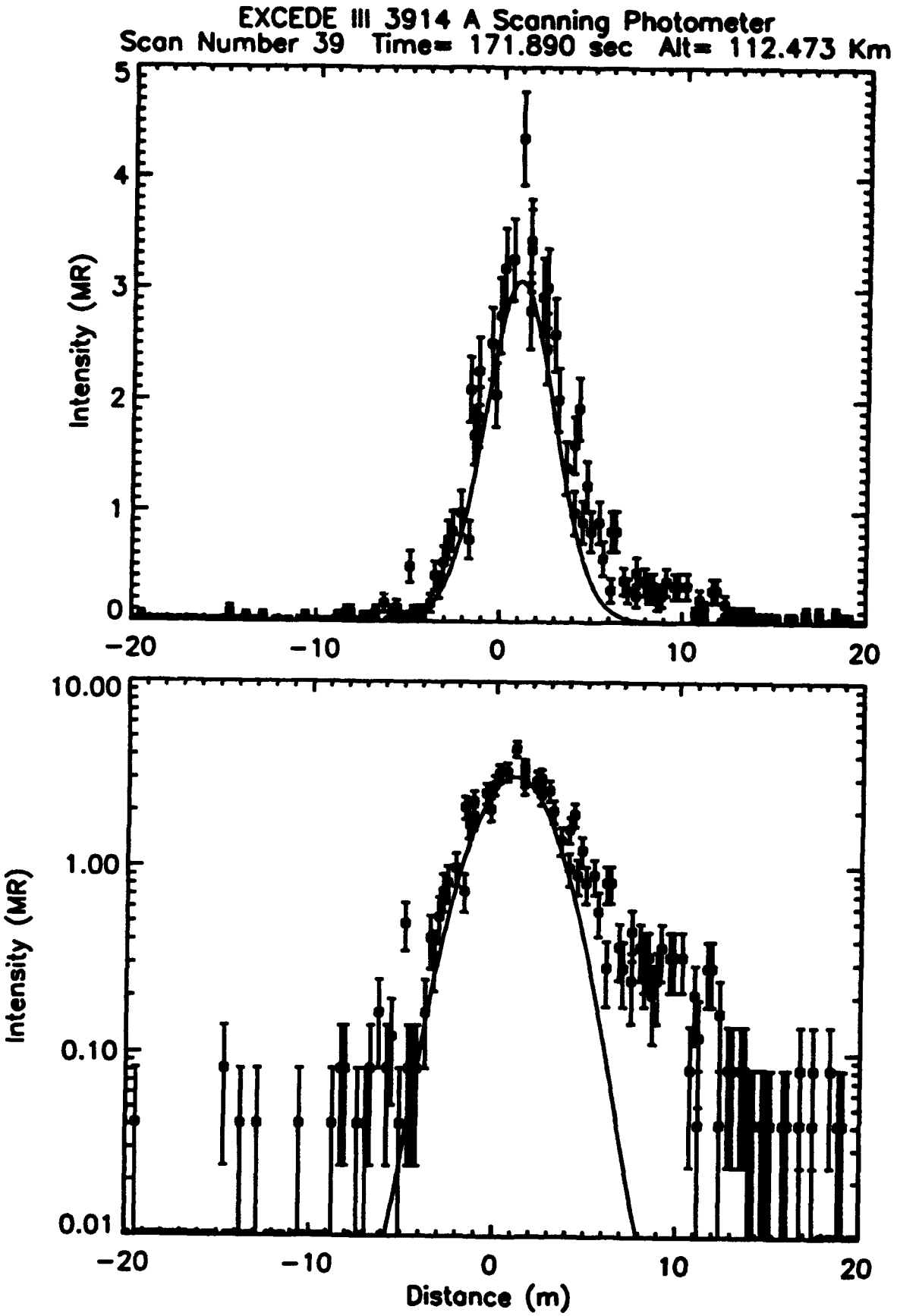

EXCEDE III 3914 A Scanning Photometer
Scan Number 34 Time= 167.289 sec Alt= 111.366 Km
Intensity (MR)
5
4
3
2
1
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

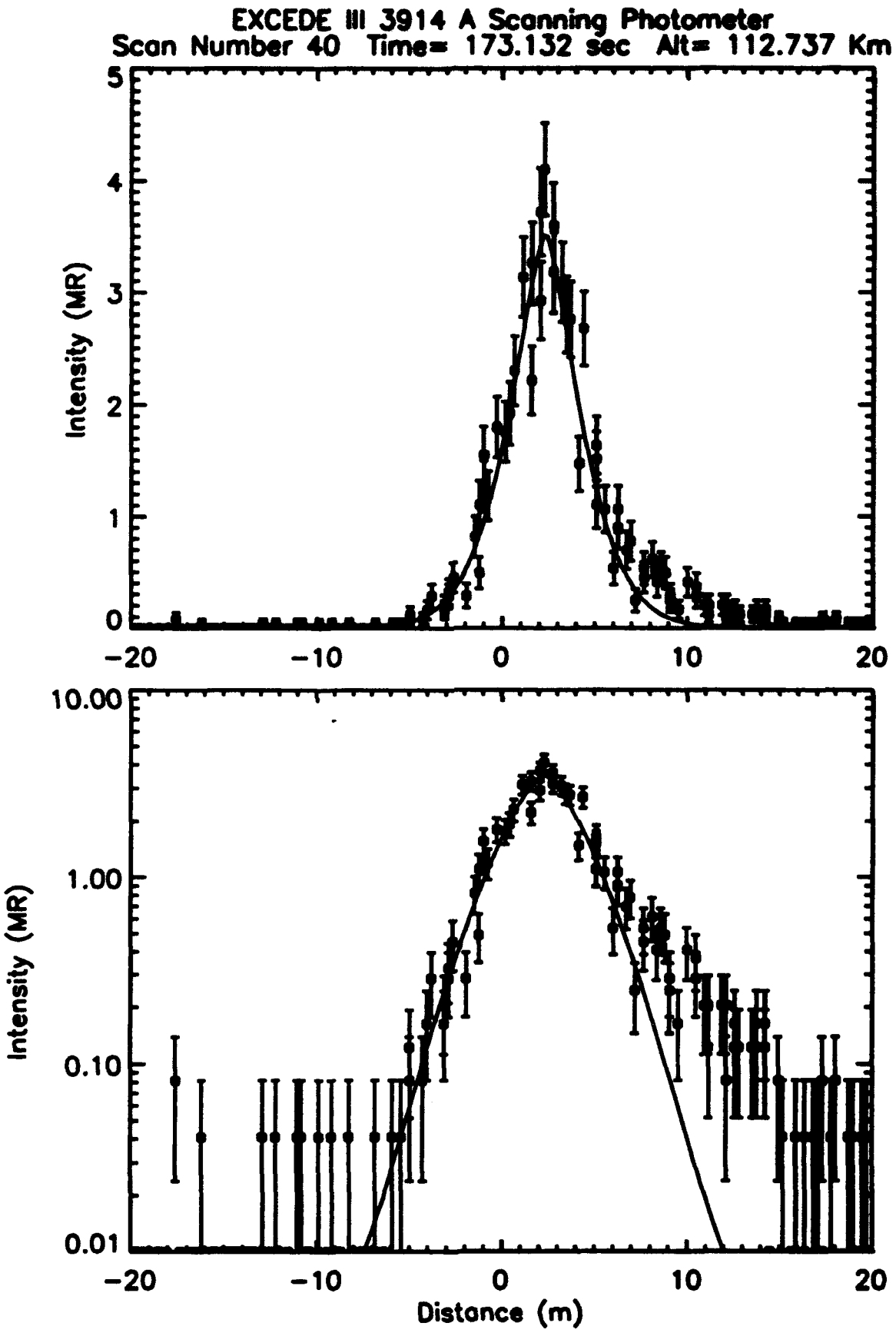

EXCEDE III 3914 A Scanning Photometer
Scan Number 35 Time= 168.117 sec Alt= 111.580 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

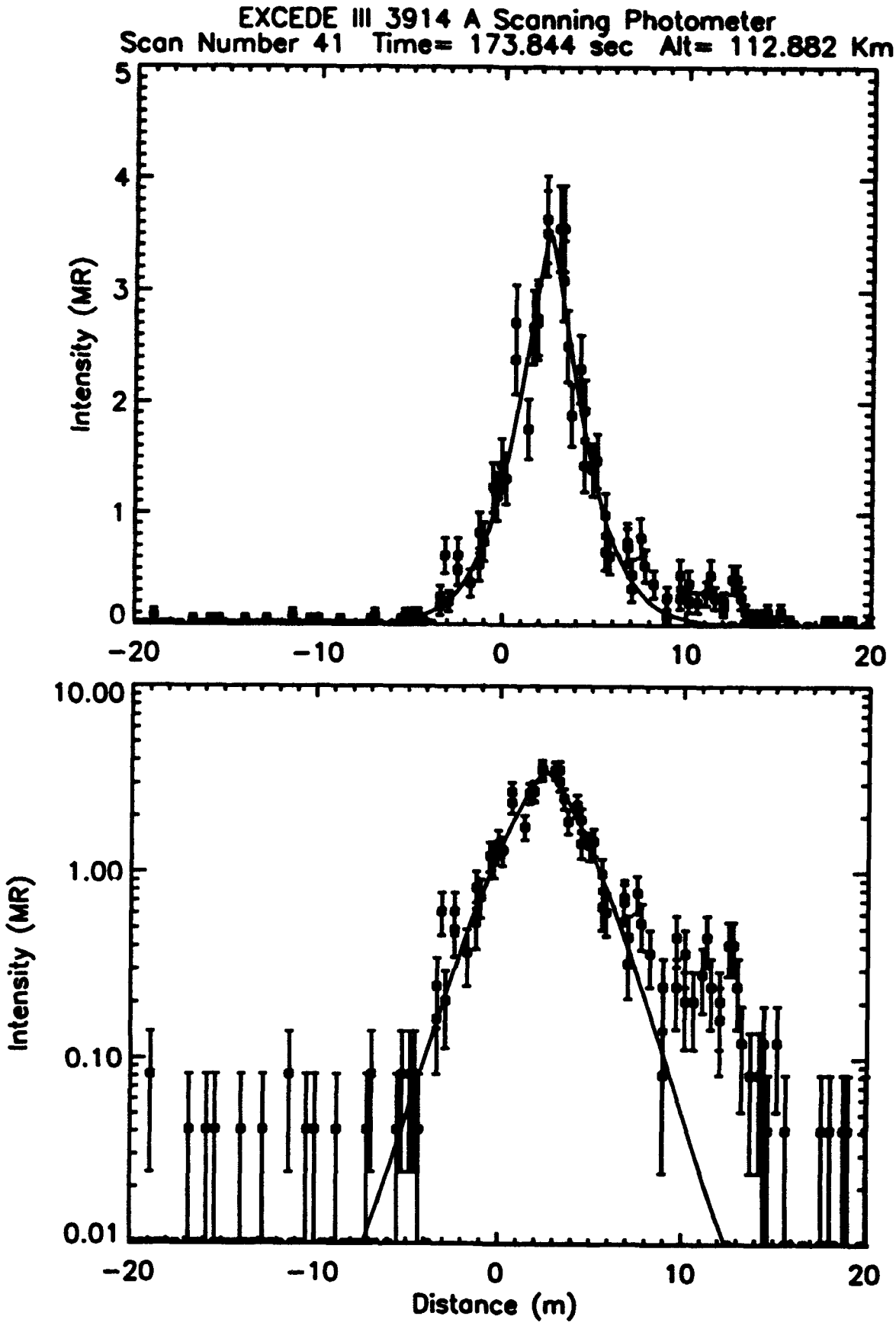

EXCEDE III 3914 A Scanning Photometer
Scan Number 36 Time= 169.109 sec Alt= 111.828 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

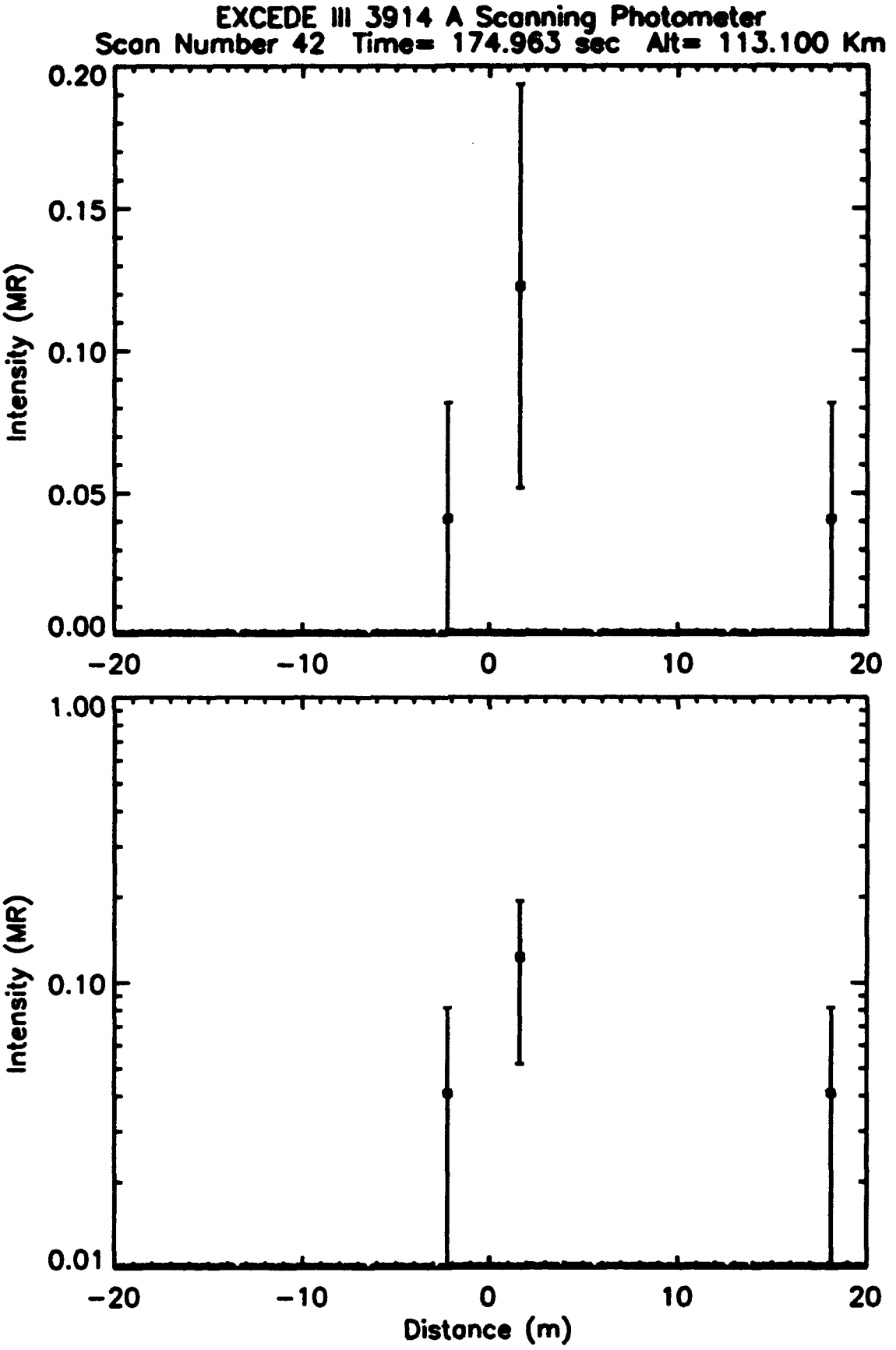

EXCEDE III 3914 A Scanning Photometer
Scan Number 37 Time= 170.069 sec Alt= 112.059 Km
Intensity (MR)
0.25
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

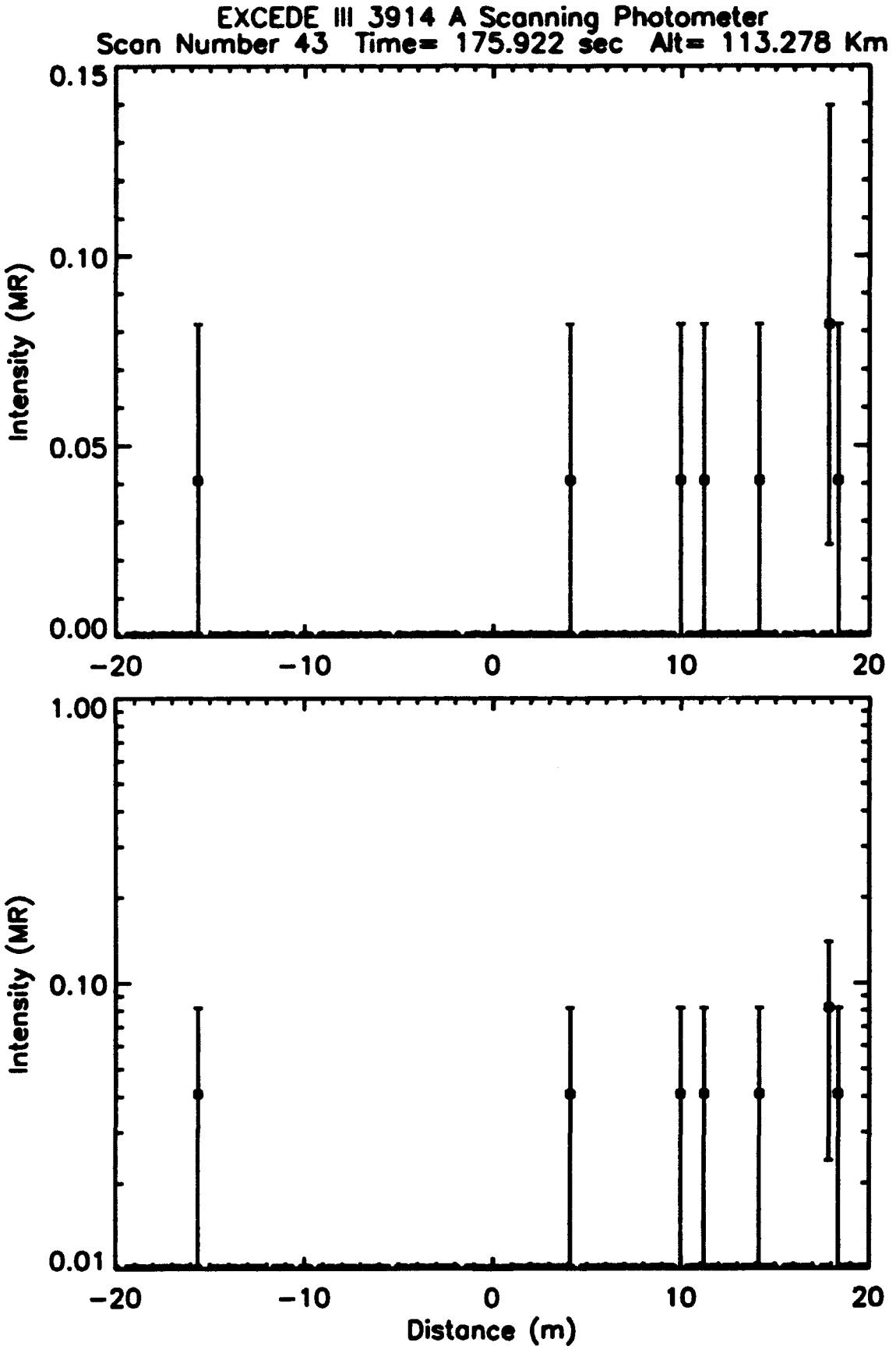

EXCEDE III 3914 A Scanning Photometer
Scan Number 38 Time= 171.189 sec Alt= 112.317 Km
Intensity (MR)
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

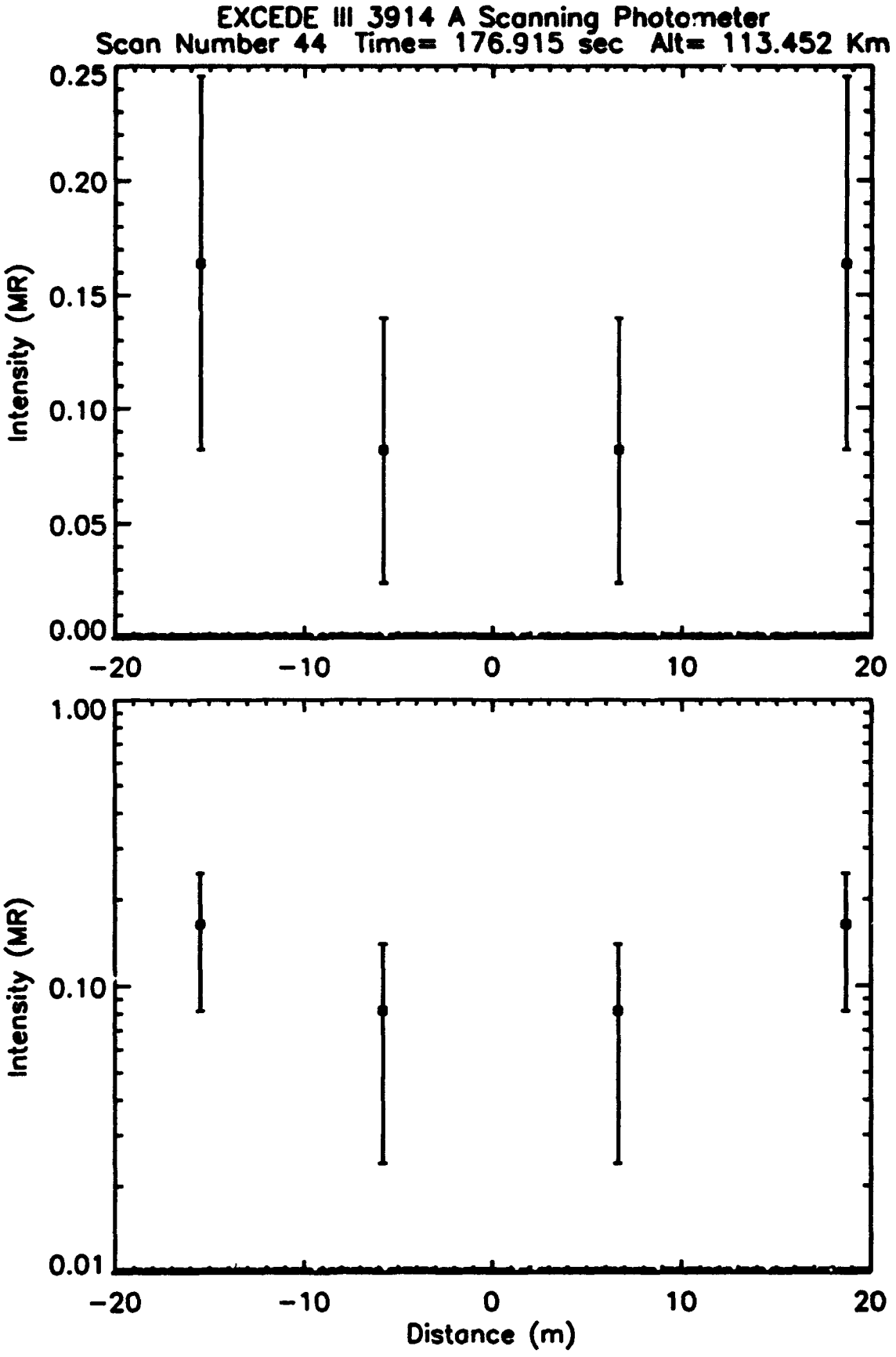

EXCEDE III 3914 A Scanning Photometer
Scan Number 39 Time= 171.890 sec Alt= 112.473 Km
Intensity (MR)
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

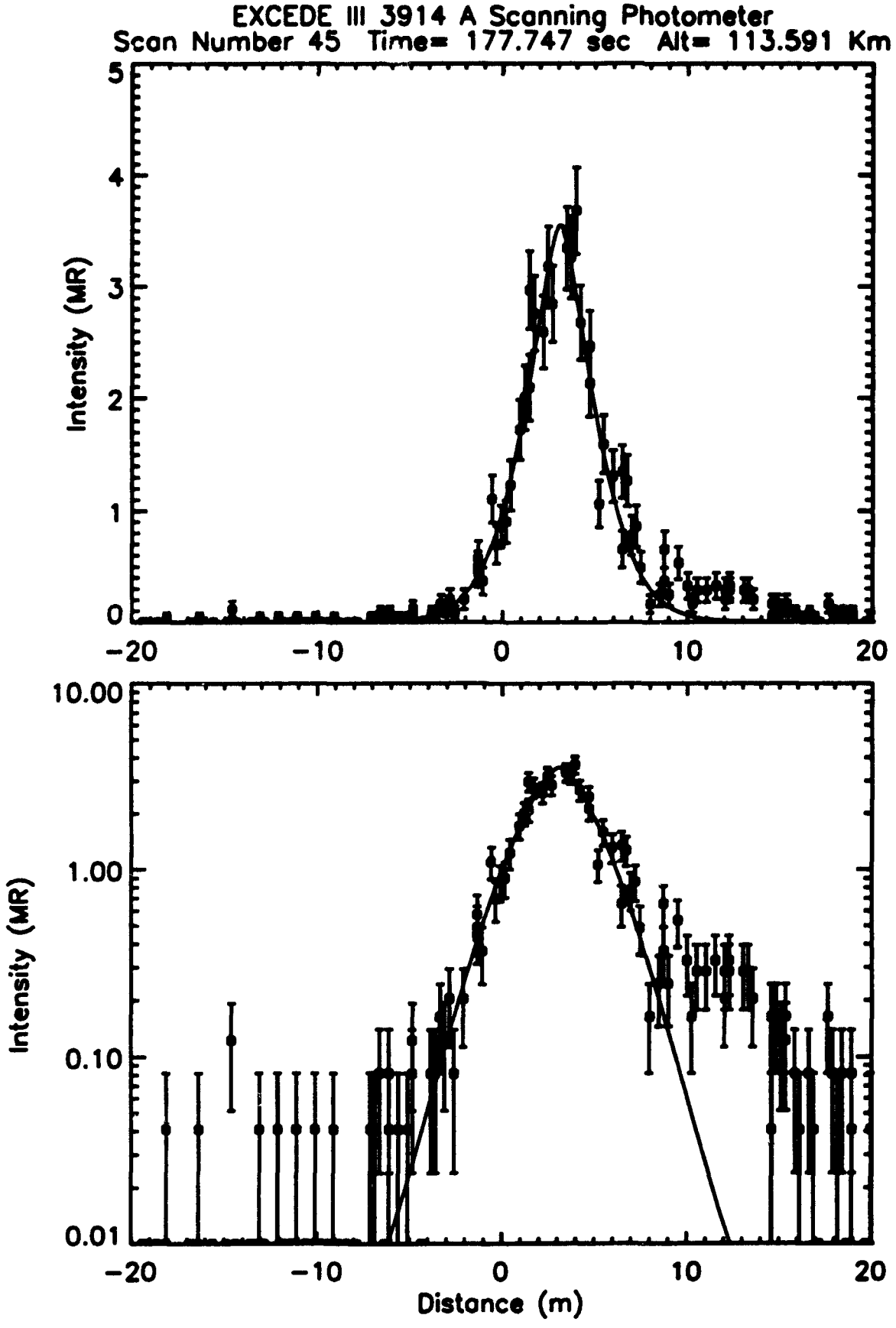

EXCEDE III 3914 A Scanning Photometer
Scan Number 40 Time= 173.132 sec Alt= 112.737 Km
Intensity (MR)
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

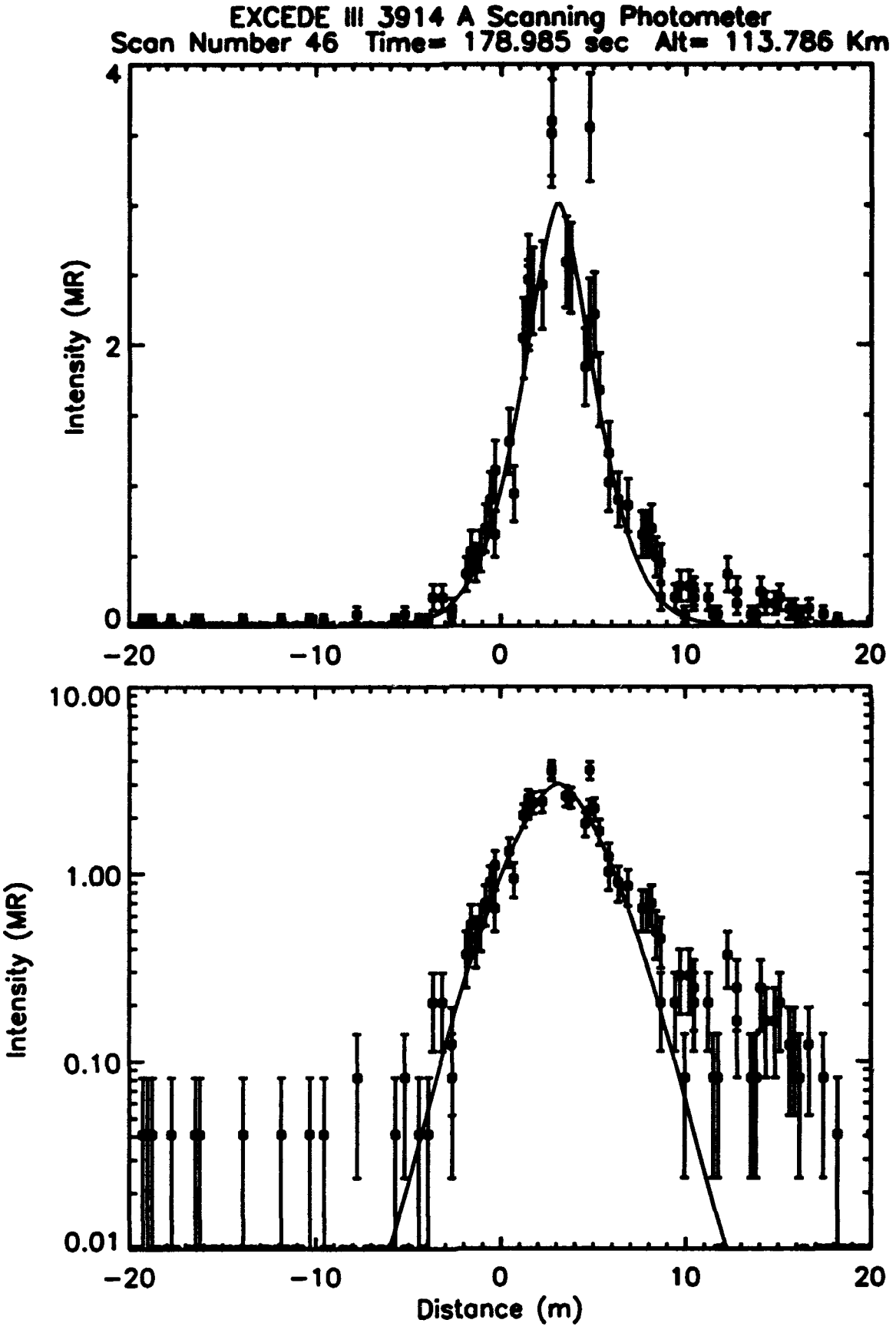

EXCEDE III 3914 A Scanning Photometer
Scan Number 41 Time= 173.844 sec Alt= 112.882 Km
Intensity (MR)
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

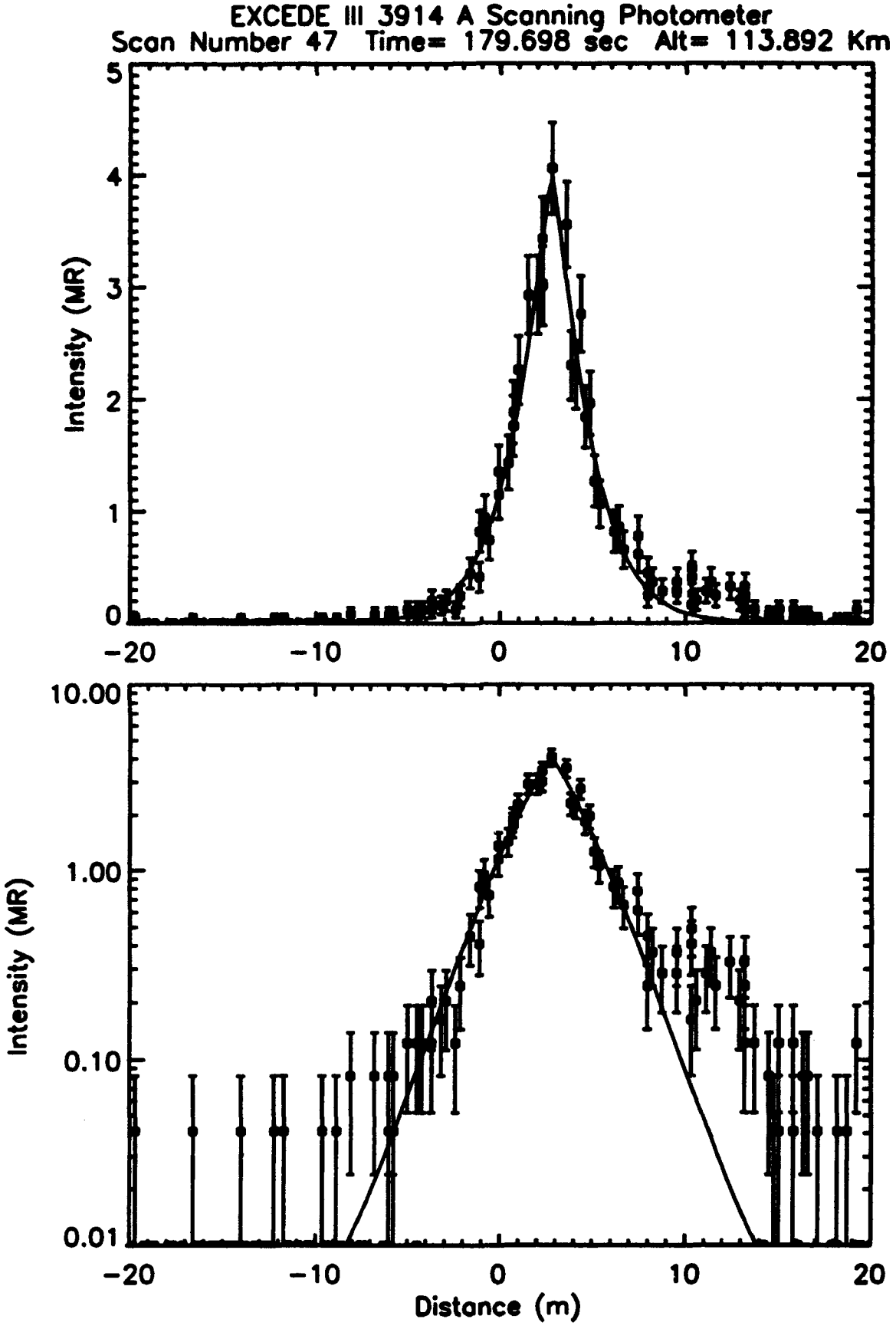

EXCEDE III 3914 A Scanning Photometer
Scan Number 42 Time= 174.963 sec Alt= 113.100 Km
0.20
0.15
0.10
0.05
0.00
Intensity (MR)
−20
−10
0
10
20
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

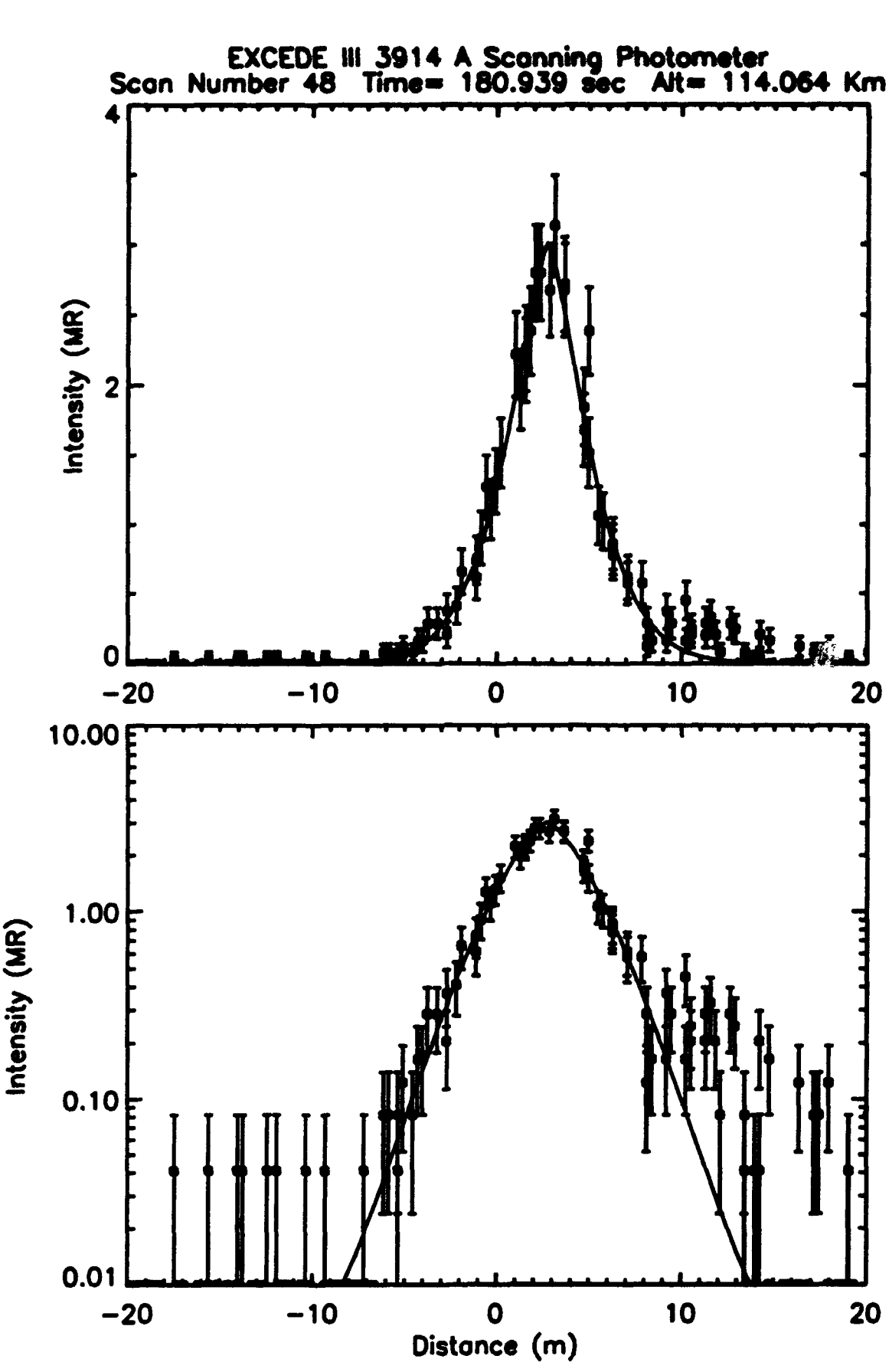

EXCEDE III 3914 A Scanning Photometer
Scan Number 43 Time= 175.922 sec Alt= 113.278 Km
Intensity (MR)
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

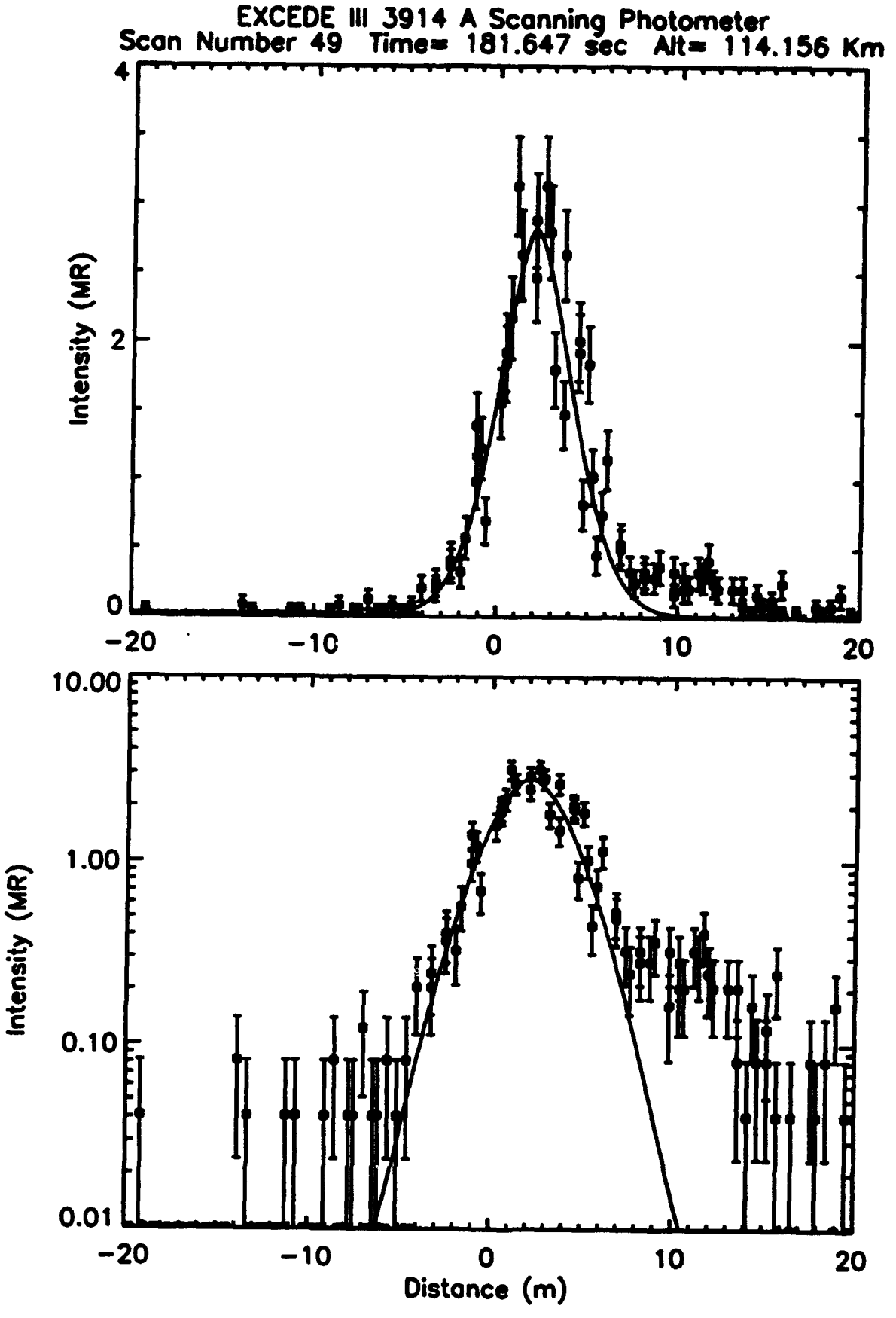

EXCEDE III 3914 A Scanning Photometer
Scan Number 44 Time= 176.915 sec Alt= 113.452 Km
Intensity (MR)
0.25
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

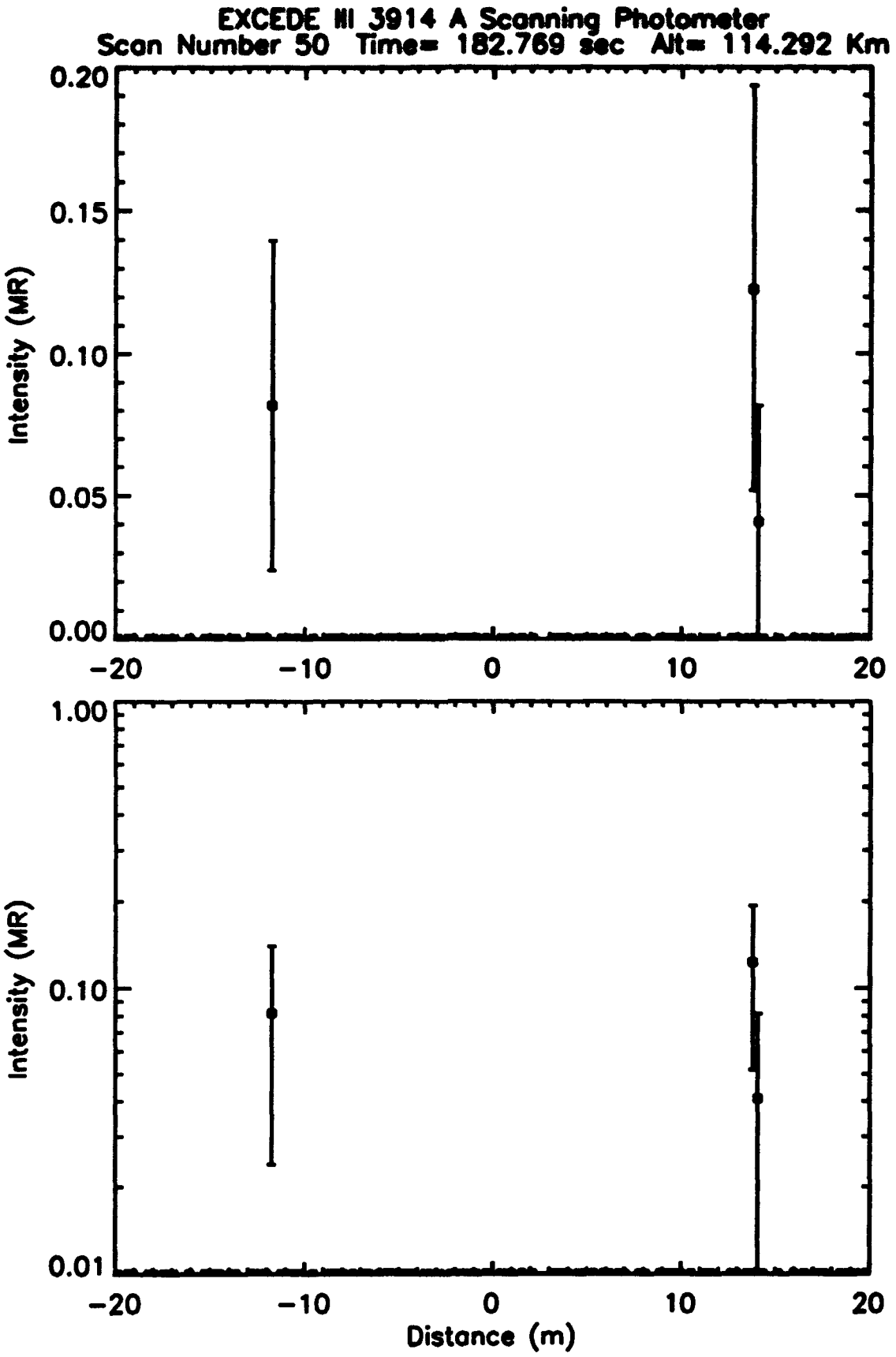

EXCEDE III 3914 A Scanning Photometer
Scan Number 45 Time= 177.747 sec Alt= 113.591 Km
Intensity (MR)
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

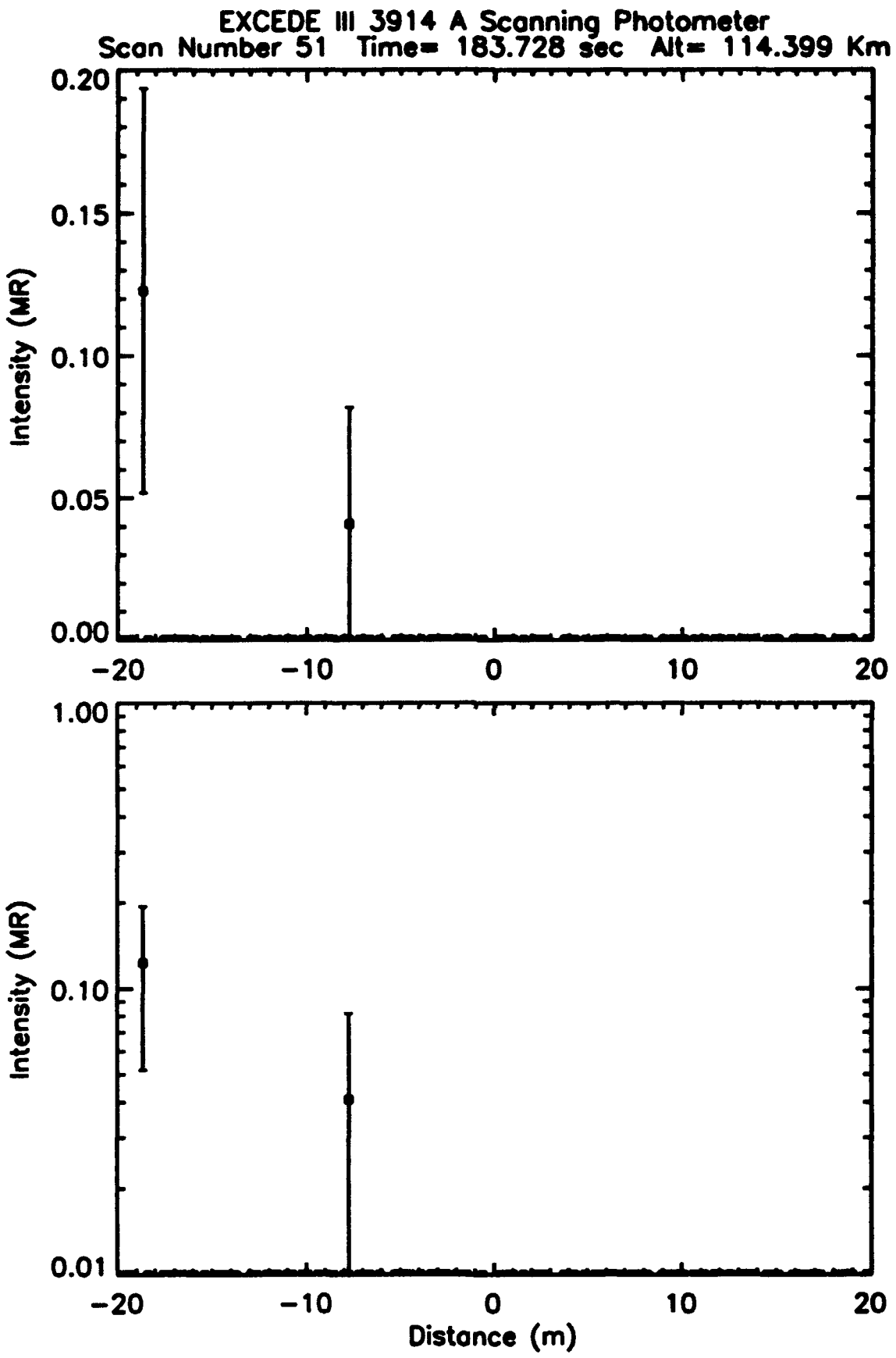

EXCEDE III 3914 A Scanning Photometer
Scan Number 46 Time= 178.985 sec Alt= 113.786 Km
Intensity (MR)
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

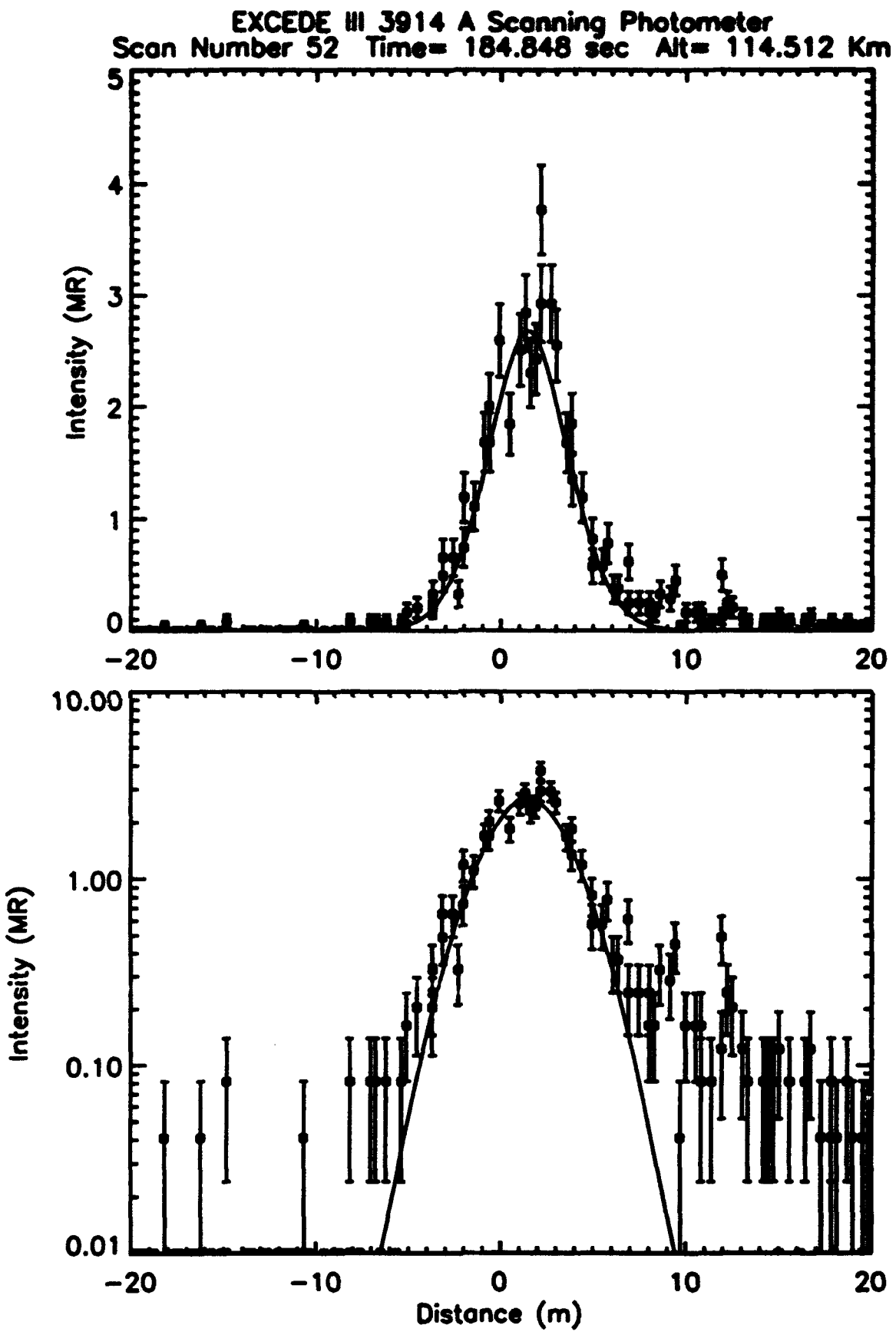

EXCEDE III 3914 A Scanning Photometer
Scan Number 47 Time= 179.698 sec Alt= 113.892 Km
Intensity (MR)
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

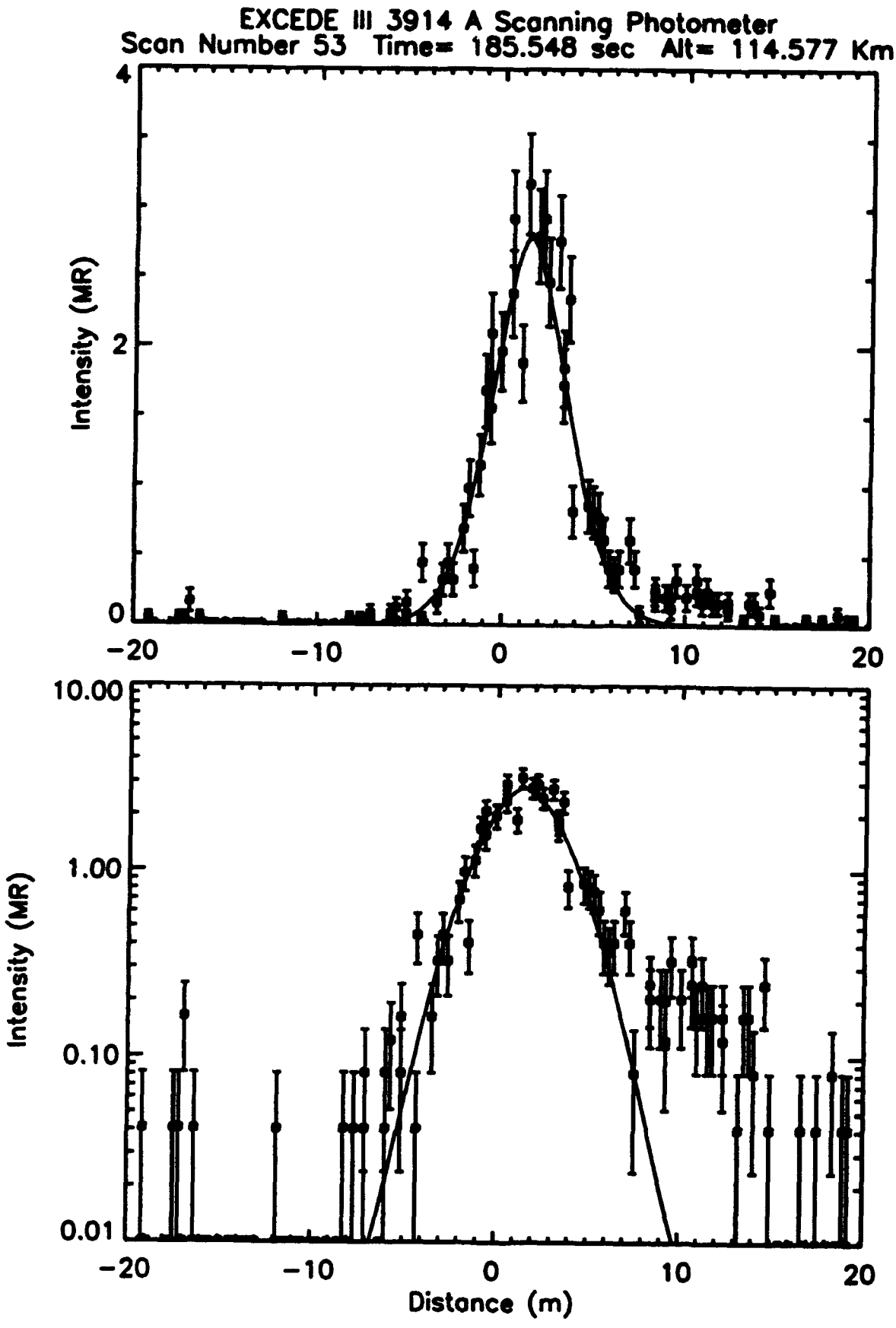

EXCEDE III 3914 A Scanning Photometer
Scan Number 48 Time= 180.939 sec Alt= 114.064 Km
Intensity (MR)
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

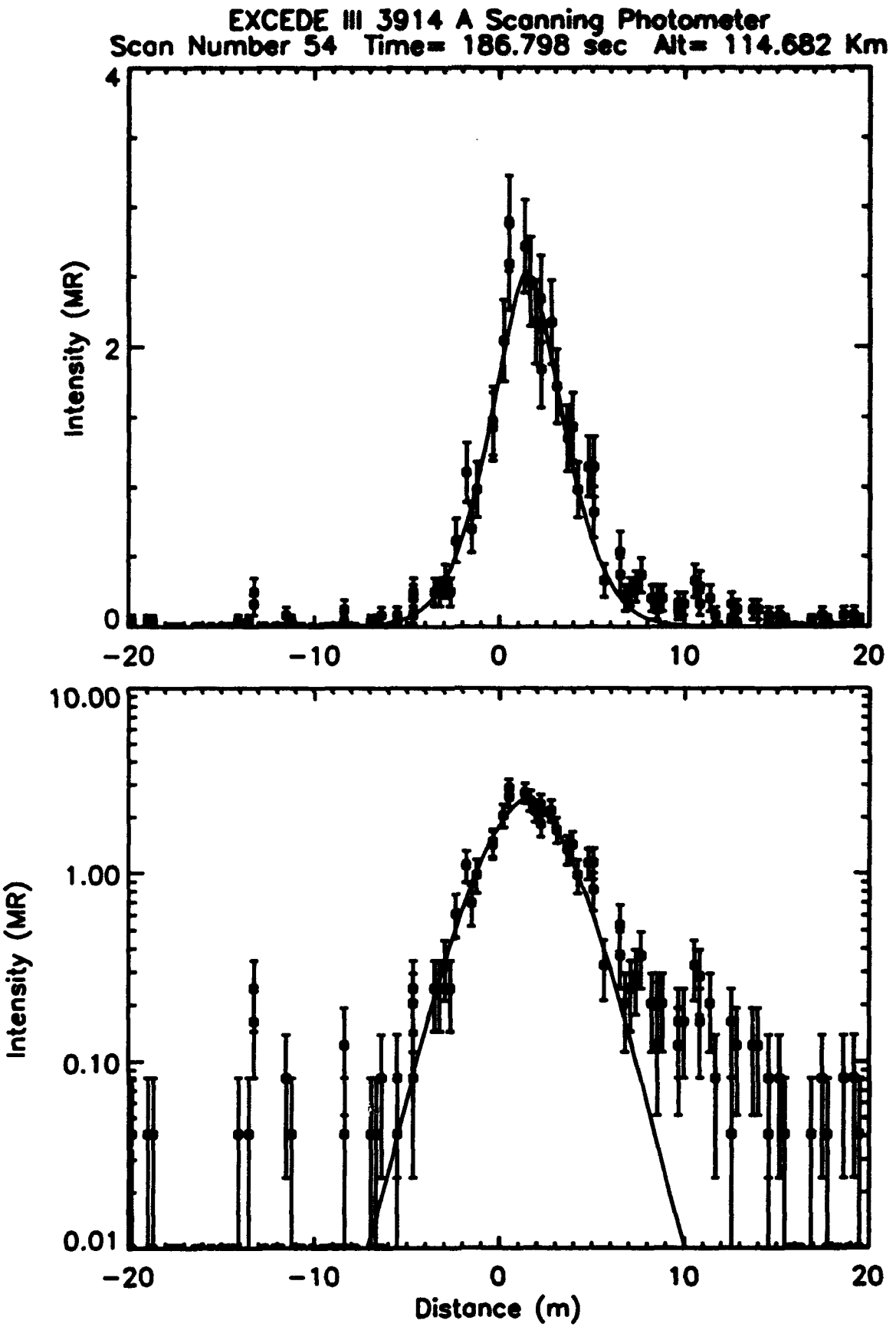

EXCEDE III 3914 A Scanning Photometer
Scan Number 49 Time= 181.647 sec Alt= 114.156 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

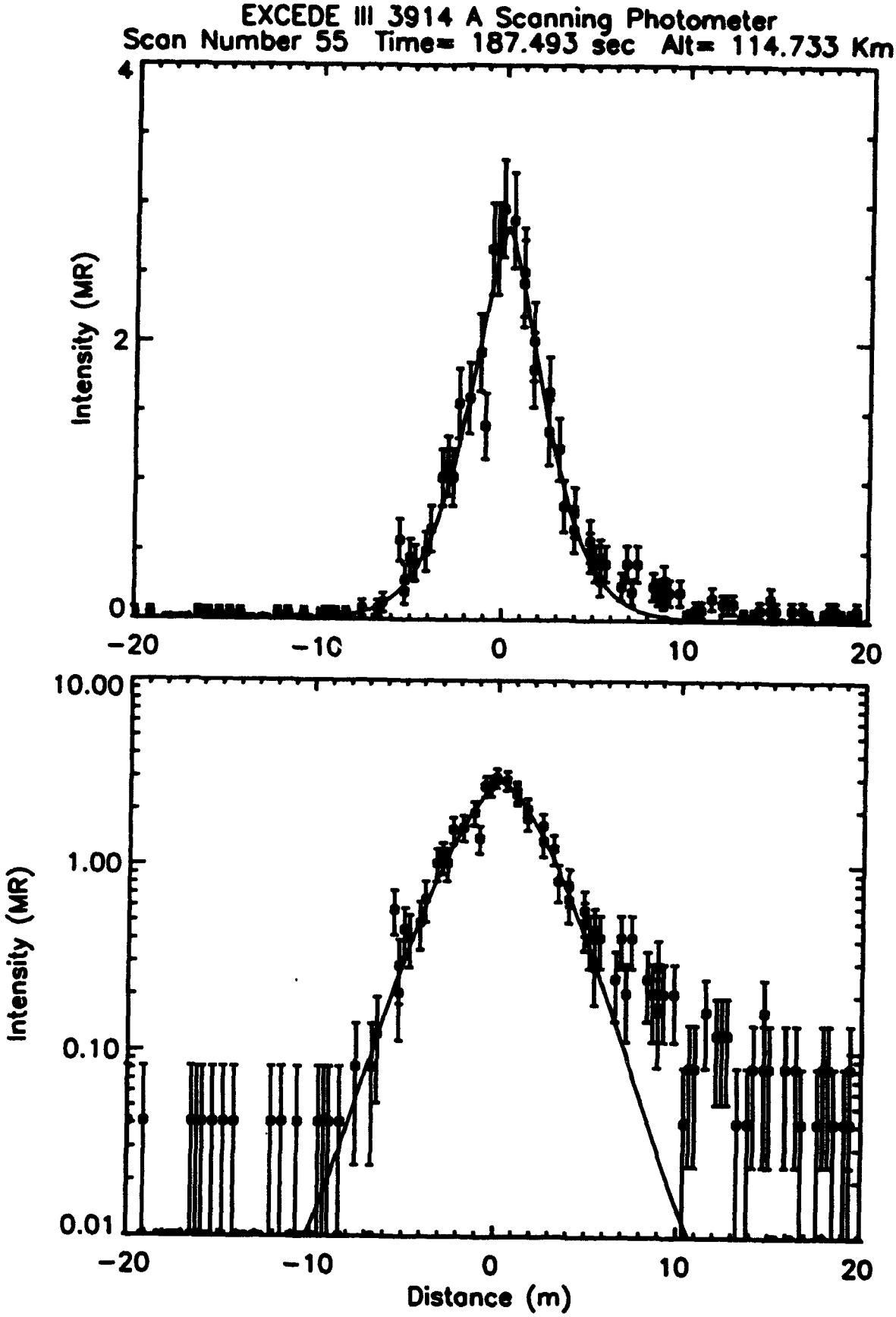

EXCEDE III 3914 A Scanning Photometer
Scan Number 50 Time= 182.769 sec Alt= 114.292 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

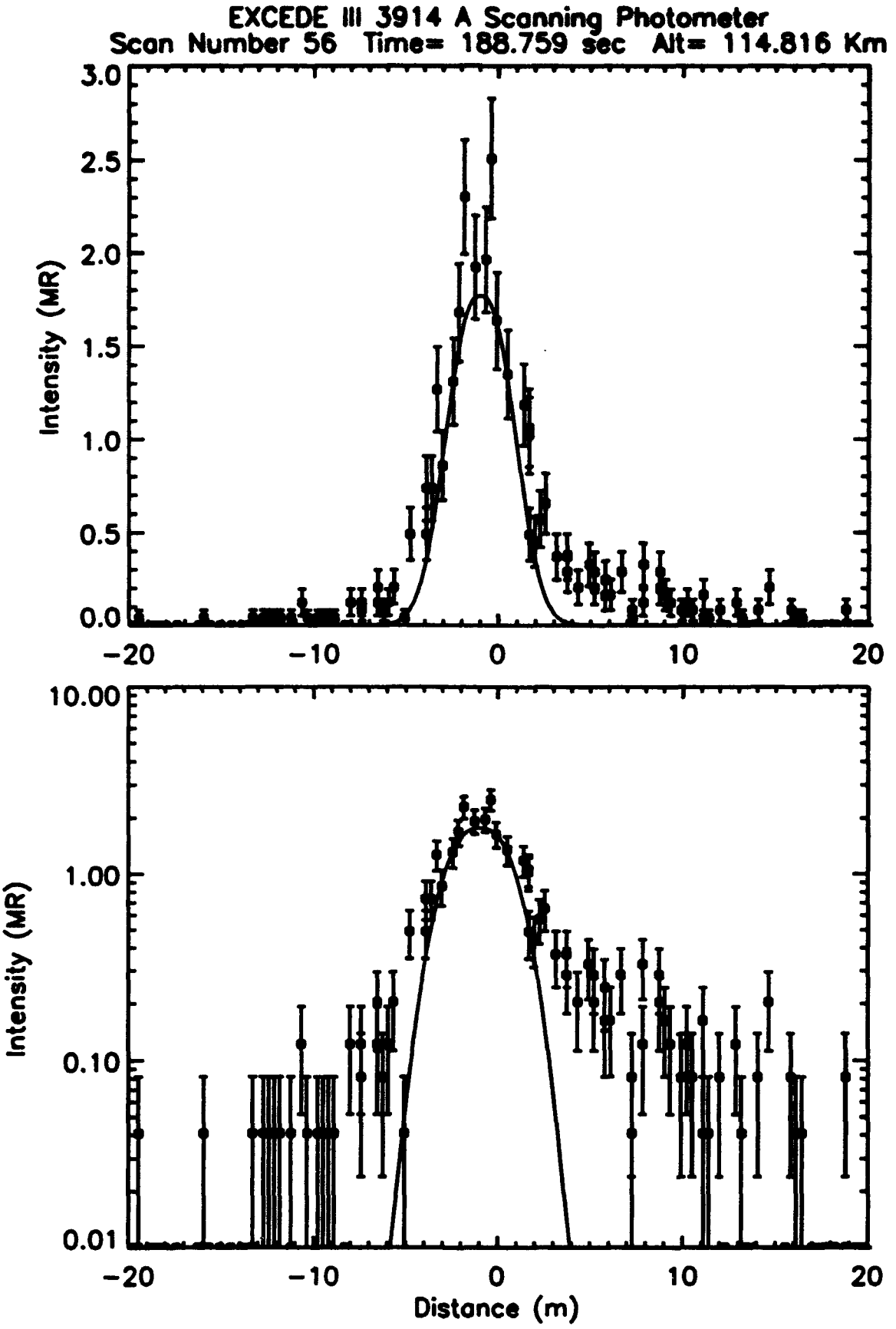

EXCEDE III 3914 A Scanning Photometer
Scan Number 51 Time= 183.728 sec Alt= 114.399 Km
0.20
0.15
0.10
0.05
0.00
Intensity (MR)
-20
-10
0
10
20
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

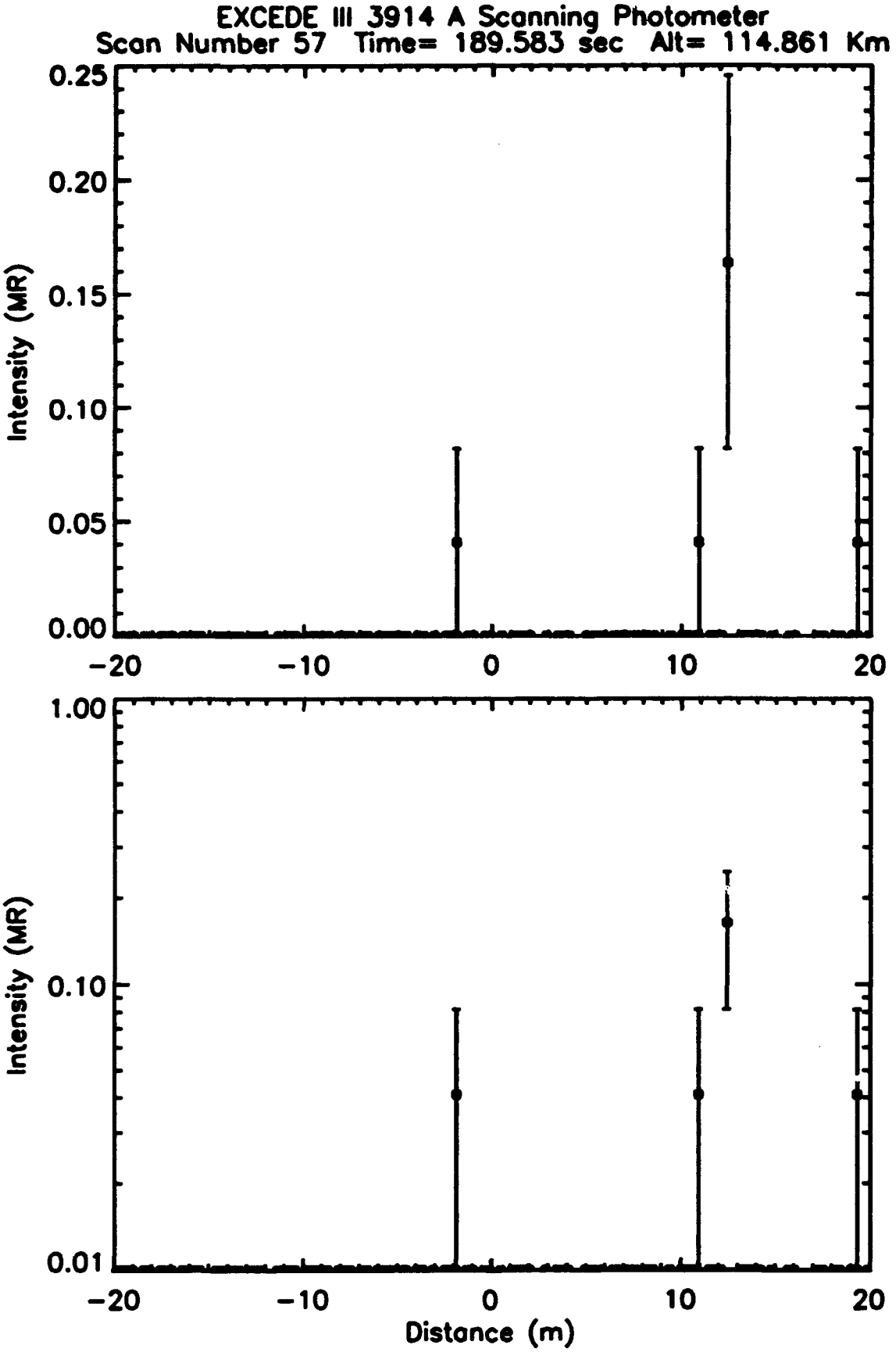

EXCEDE III 3914 A Scanning Photometer
Scan Number 52 Time= 184.848 sec Alt= 114.512 Km
Intensity (MR)
5
4
3
2
1
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

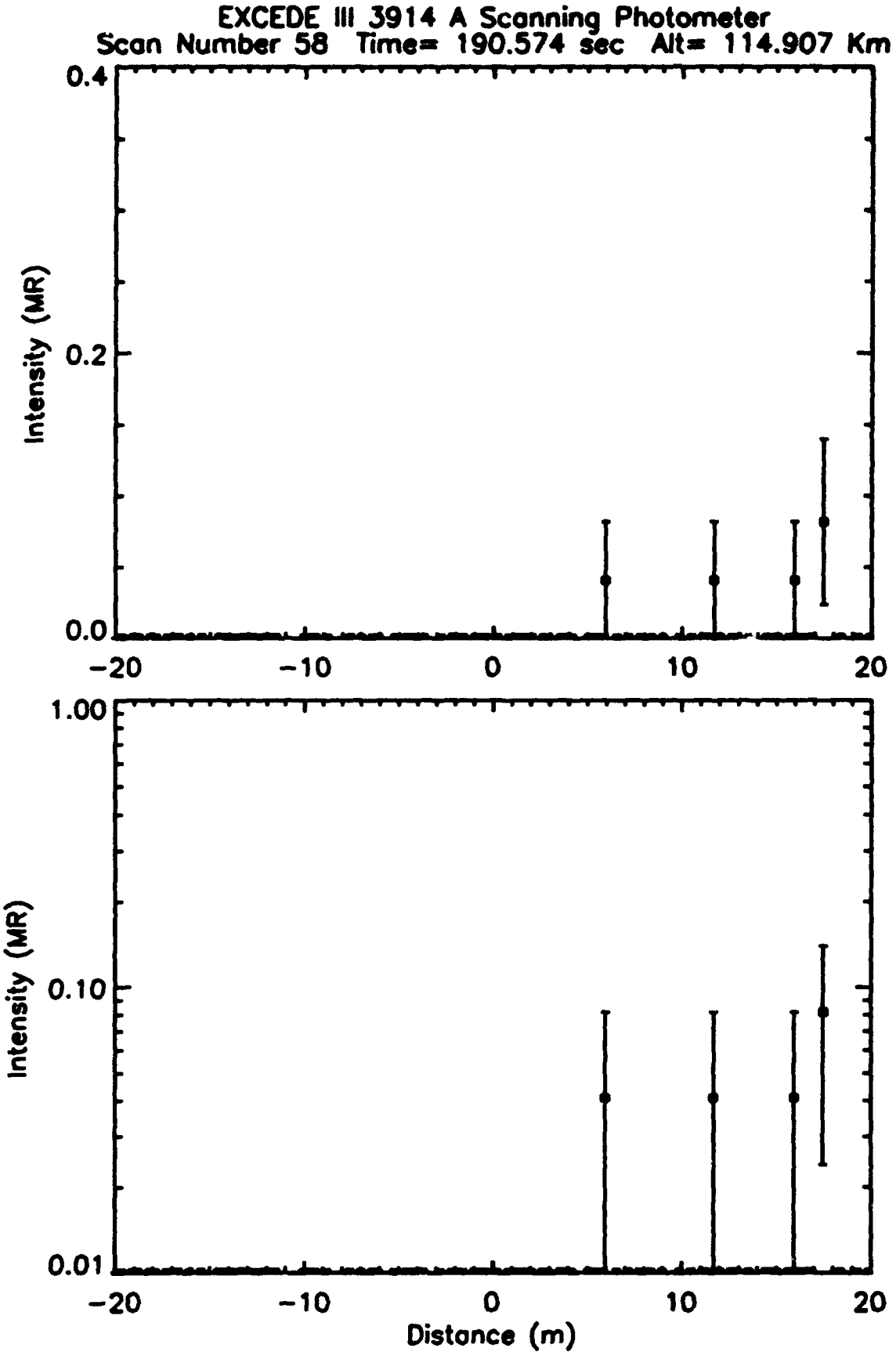

EXCEDE III 3914 A Scanning Photometer
Scan Number 53 Time= 185.548 sec Alt= 114.577 Km
Intensity (MR)
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

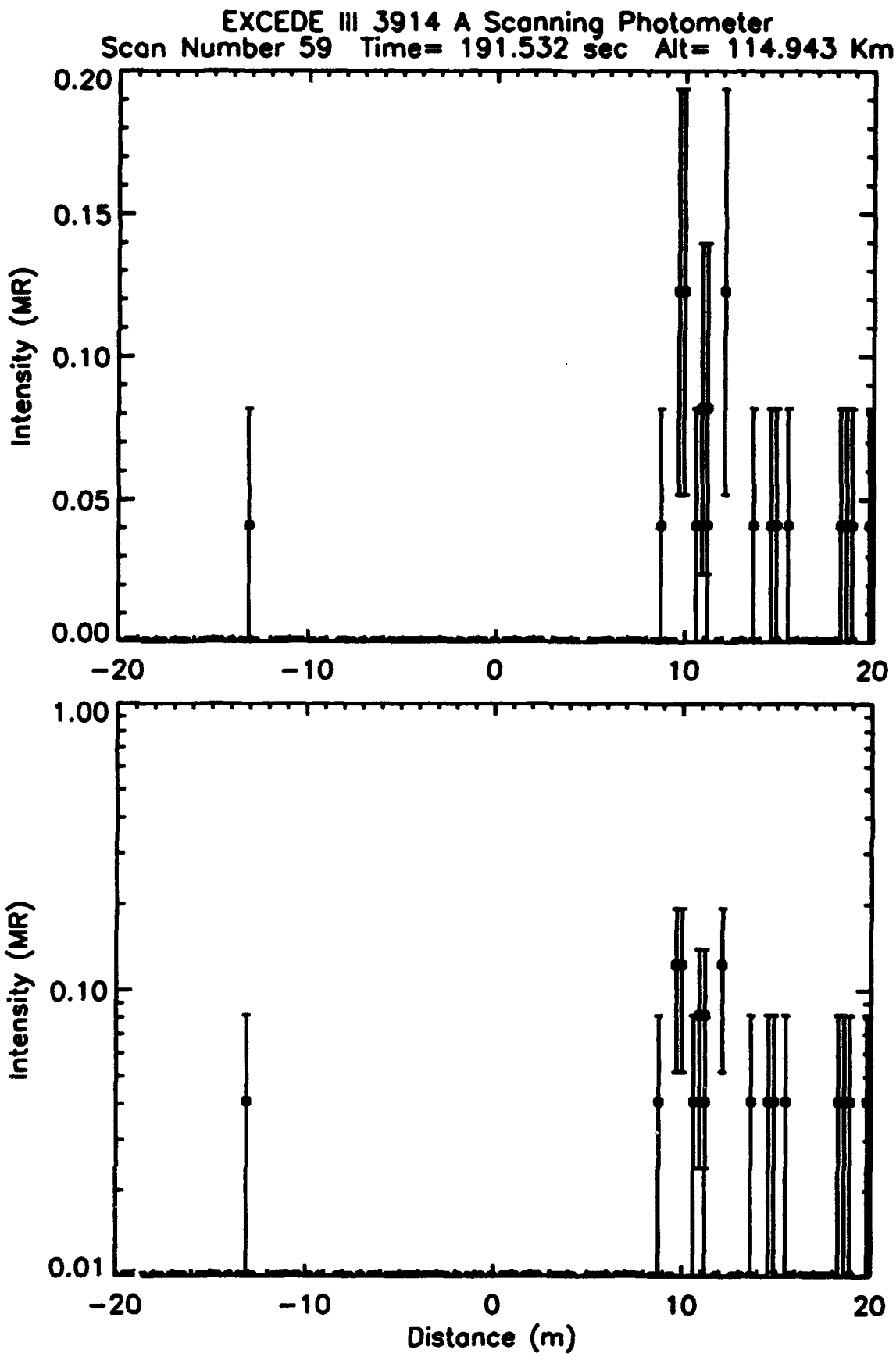

EXCEDE III 3914 A Scanning Photometer
Scan Number 54 Time= 186.798 sec Alt= 114.682 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

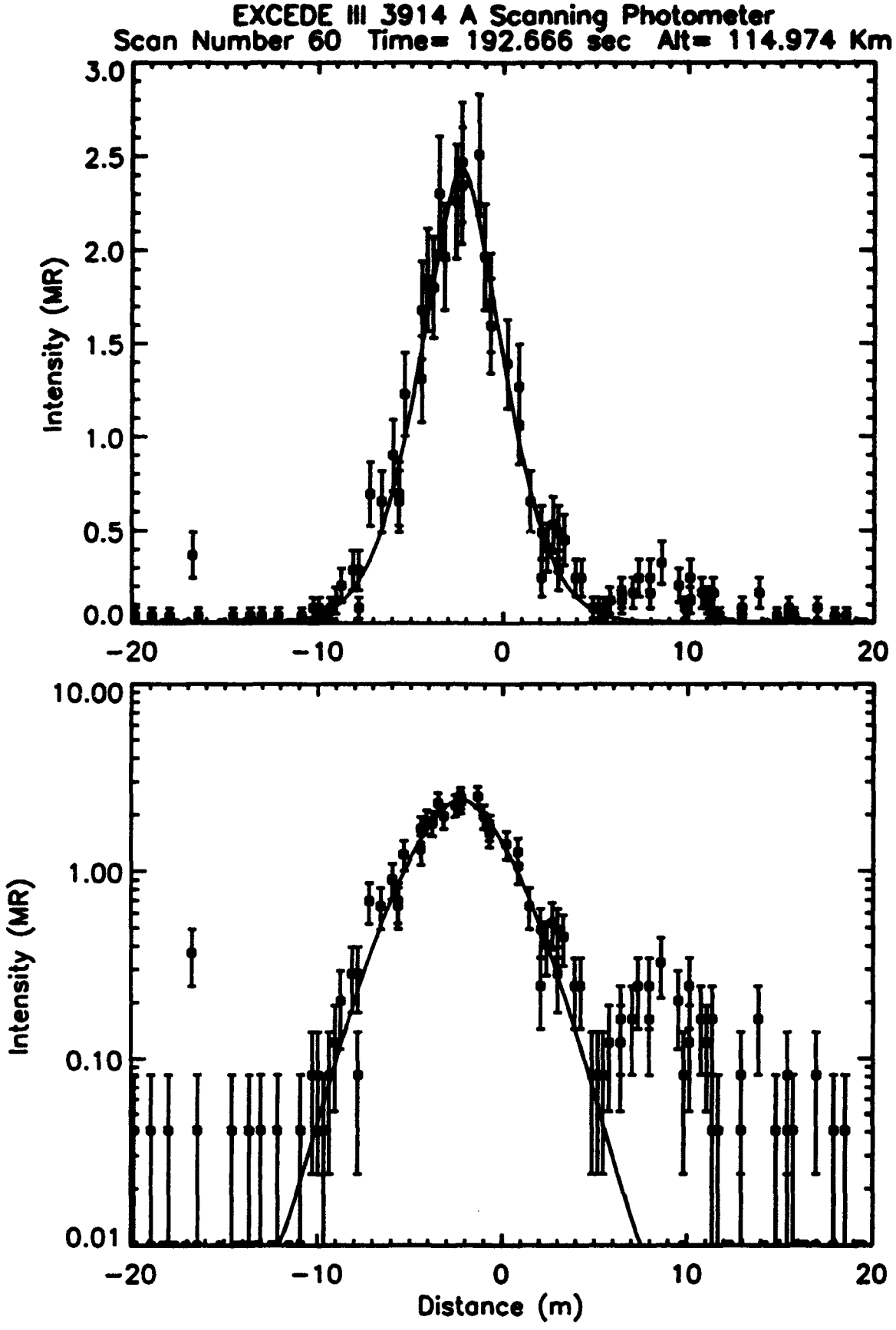

EXCEDE III 3914 A Scanning Photometer
Scan Number 55 Time= 187.493 sec Alt= 114.733 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

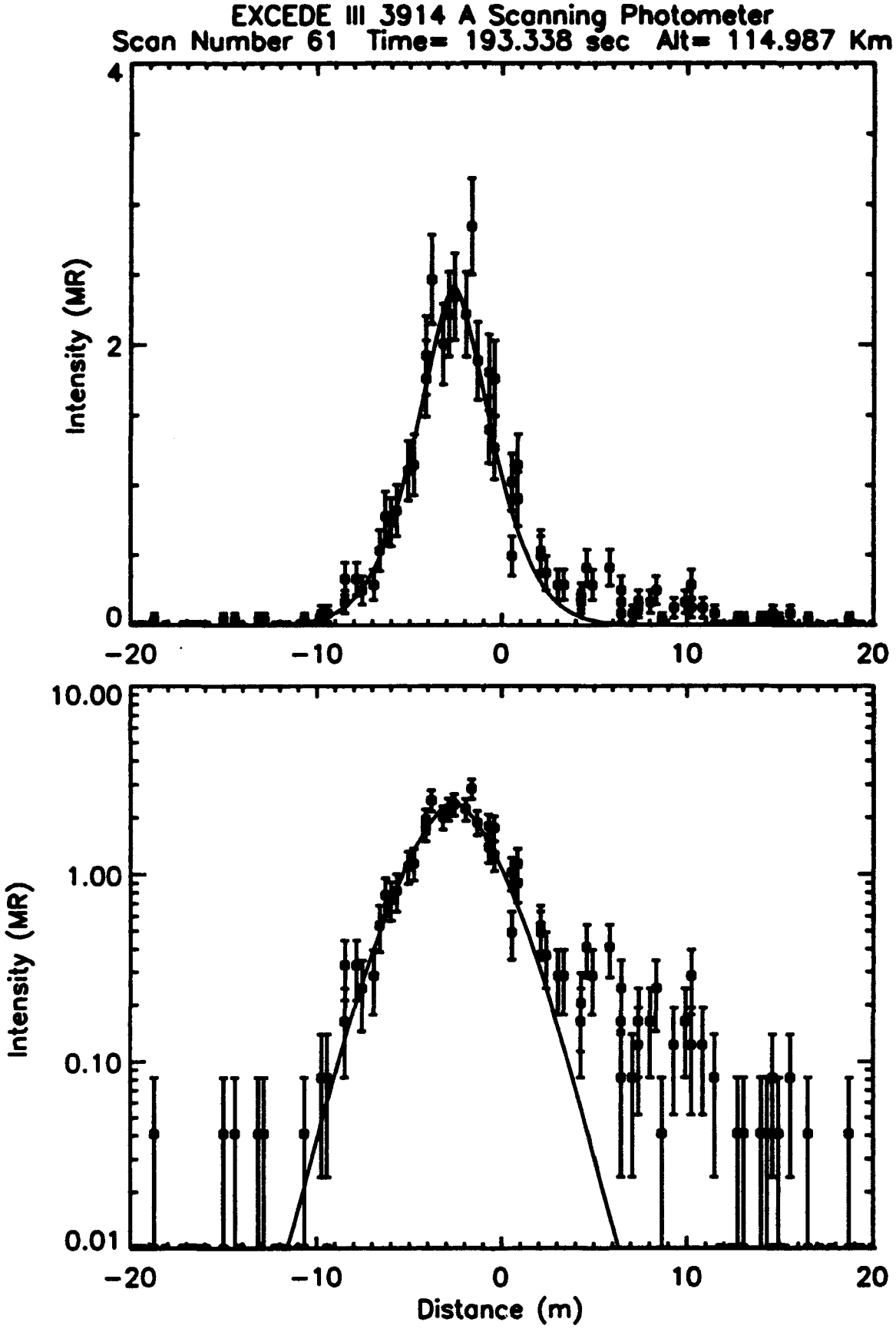

EXCEDE III 3914 A Scanning Photometer
Scan Number 56 Time= 188.759 sec Alt= 114.816 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

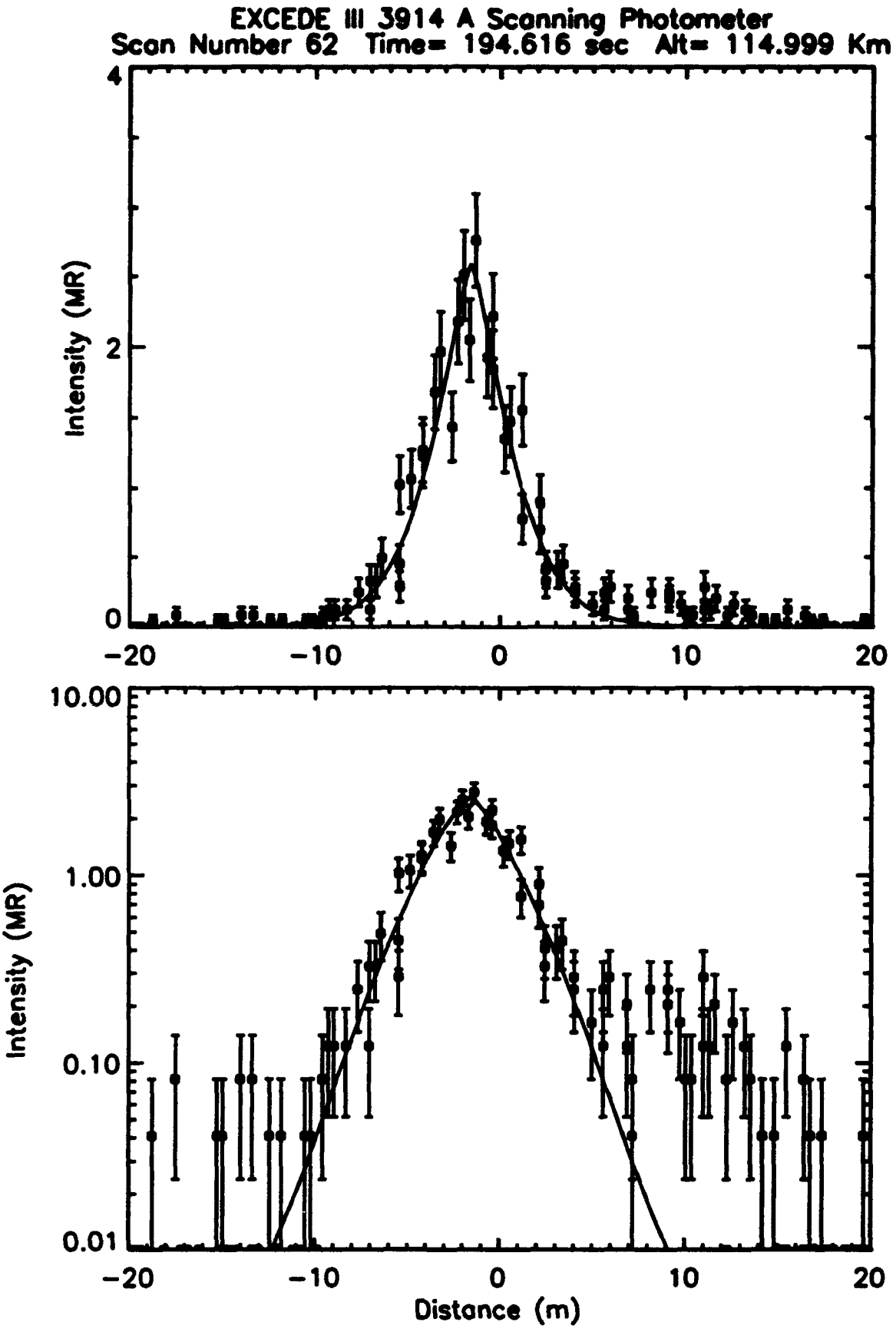

EXCEDE III 3914 A Scanning Photometer
Scan Number 57 Time= 189.583 sec Alt= 114.861 Km
Intensity (MR)
0.25
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

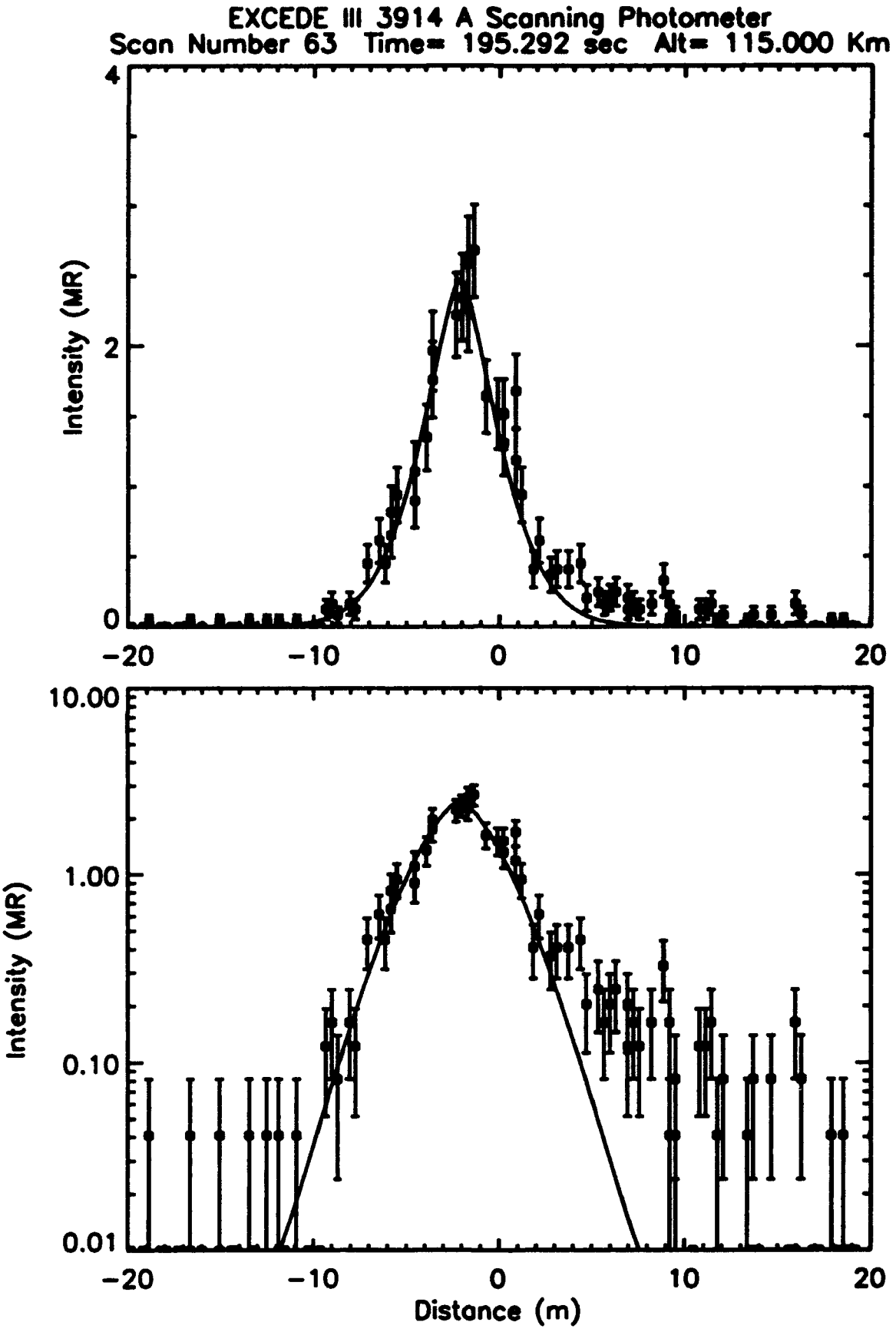

EXCEDE III 3914 A Scanning Photometer
Scan Number 58 Time= 190.574 sec Alt= 114.907 Km
Intensity (MR)
0.4
0.2
0.0
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

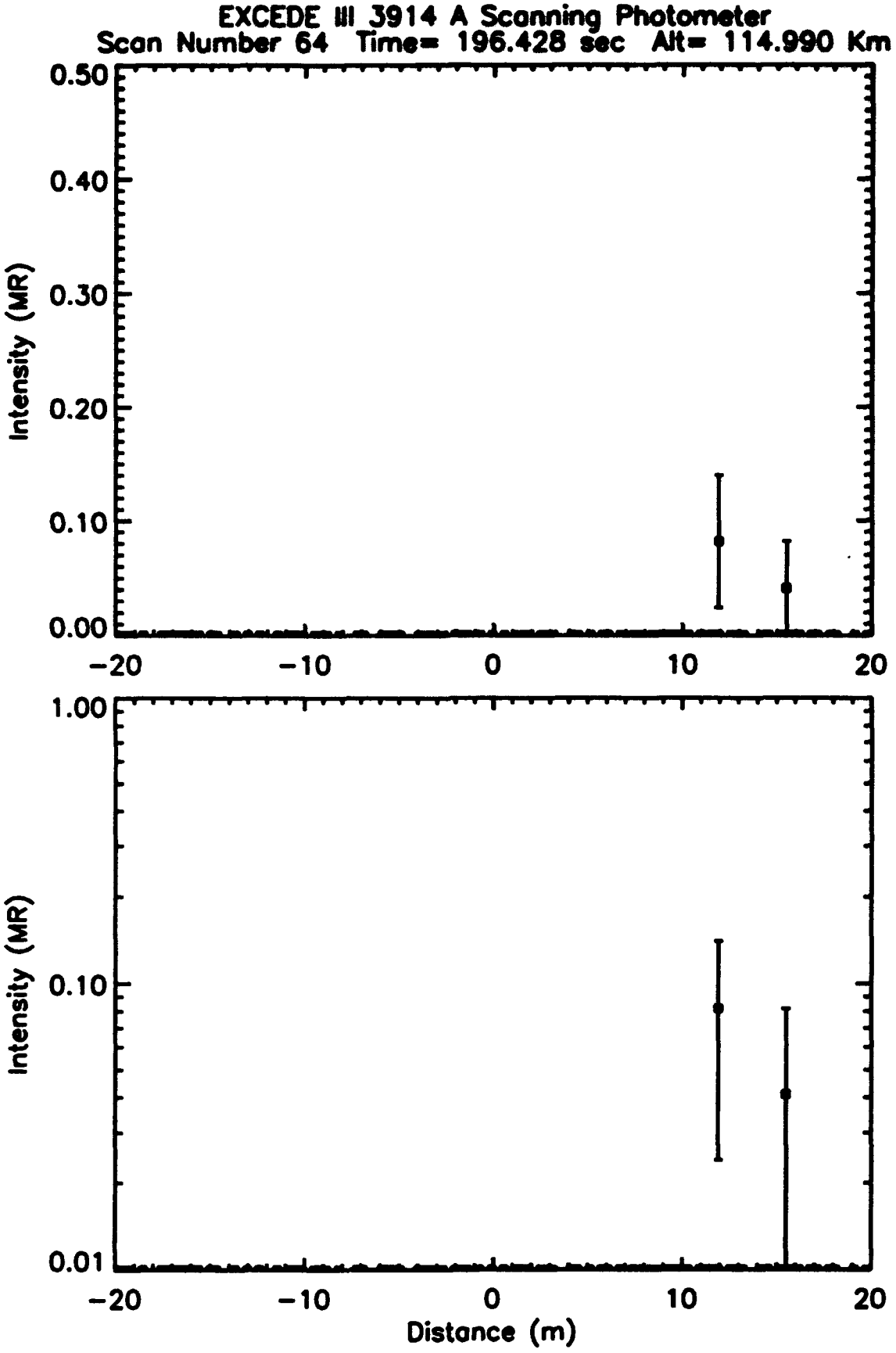

EXCEDE III 3914 A Scanning Photometer
Scan Number 59 Time= 191.532 sec Alt= 114.943 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

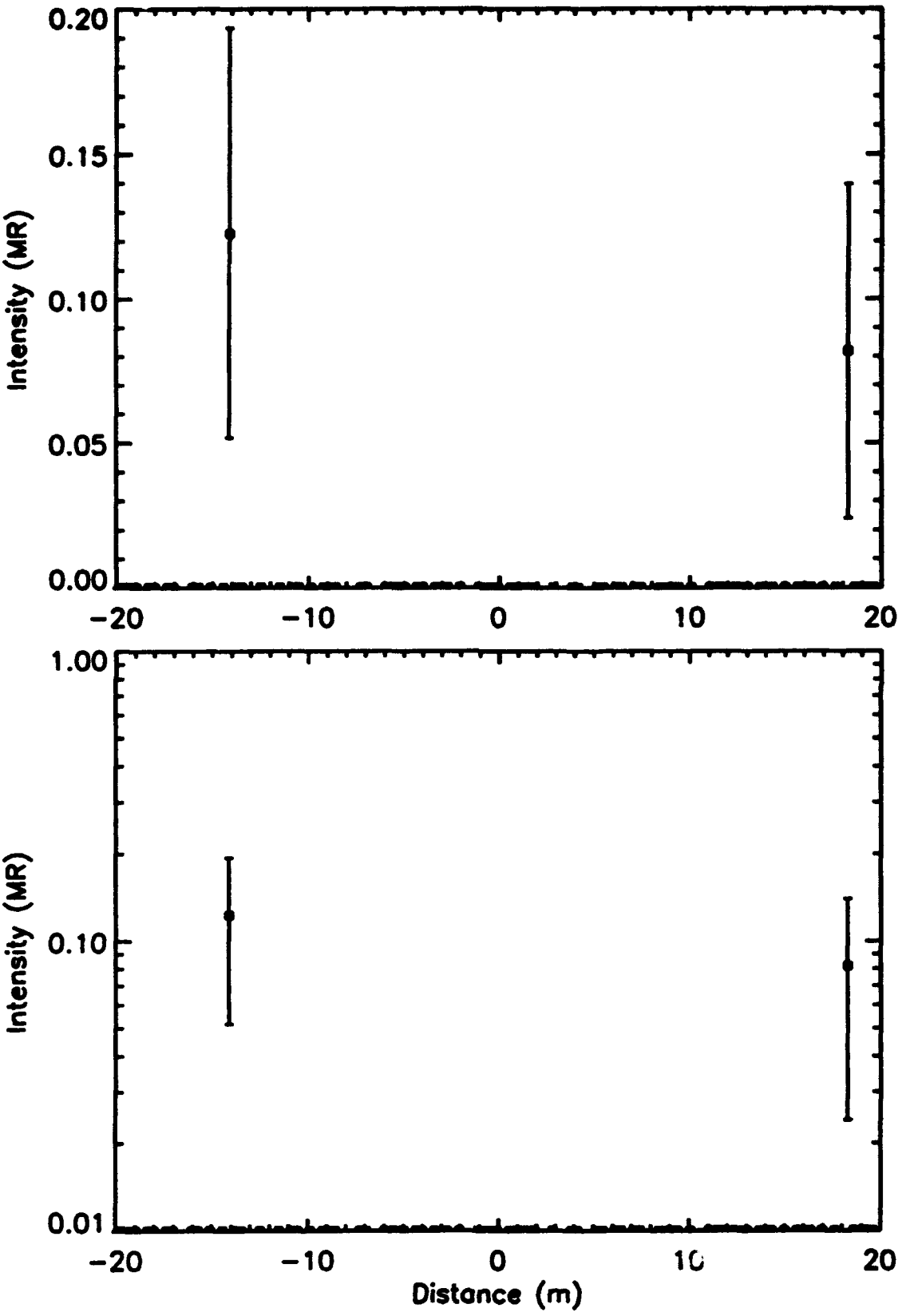

EXCEDE III 3914 A Scanning Photometer
Scan Number 60 Time= 192.666 sec Alt= 114.974 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

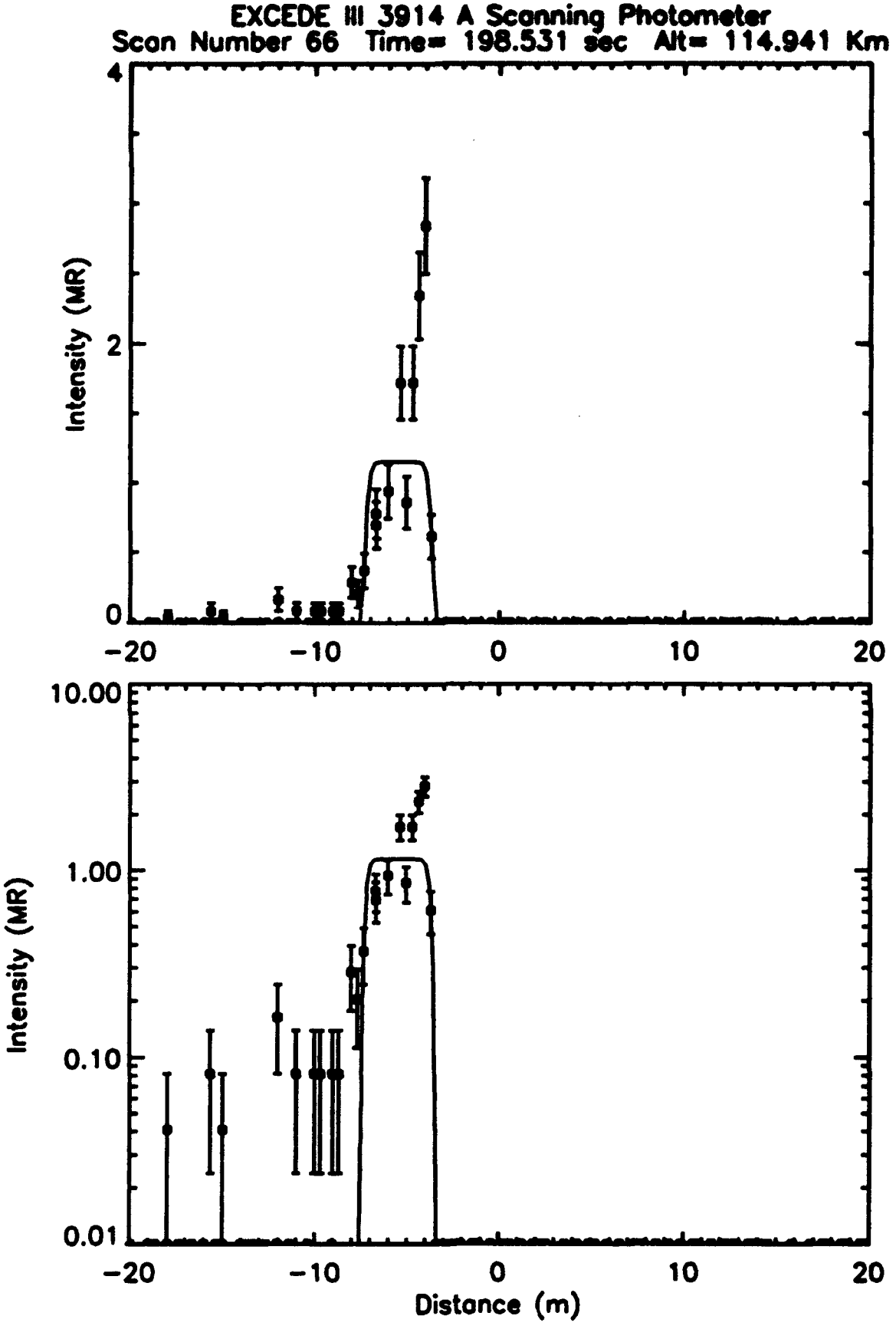

EXCEDE III 3914 A Scanning Photometer
Scan Number 61 Time= 193.338 sec Alt= 114.987 Km
Intensity (MR)
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

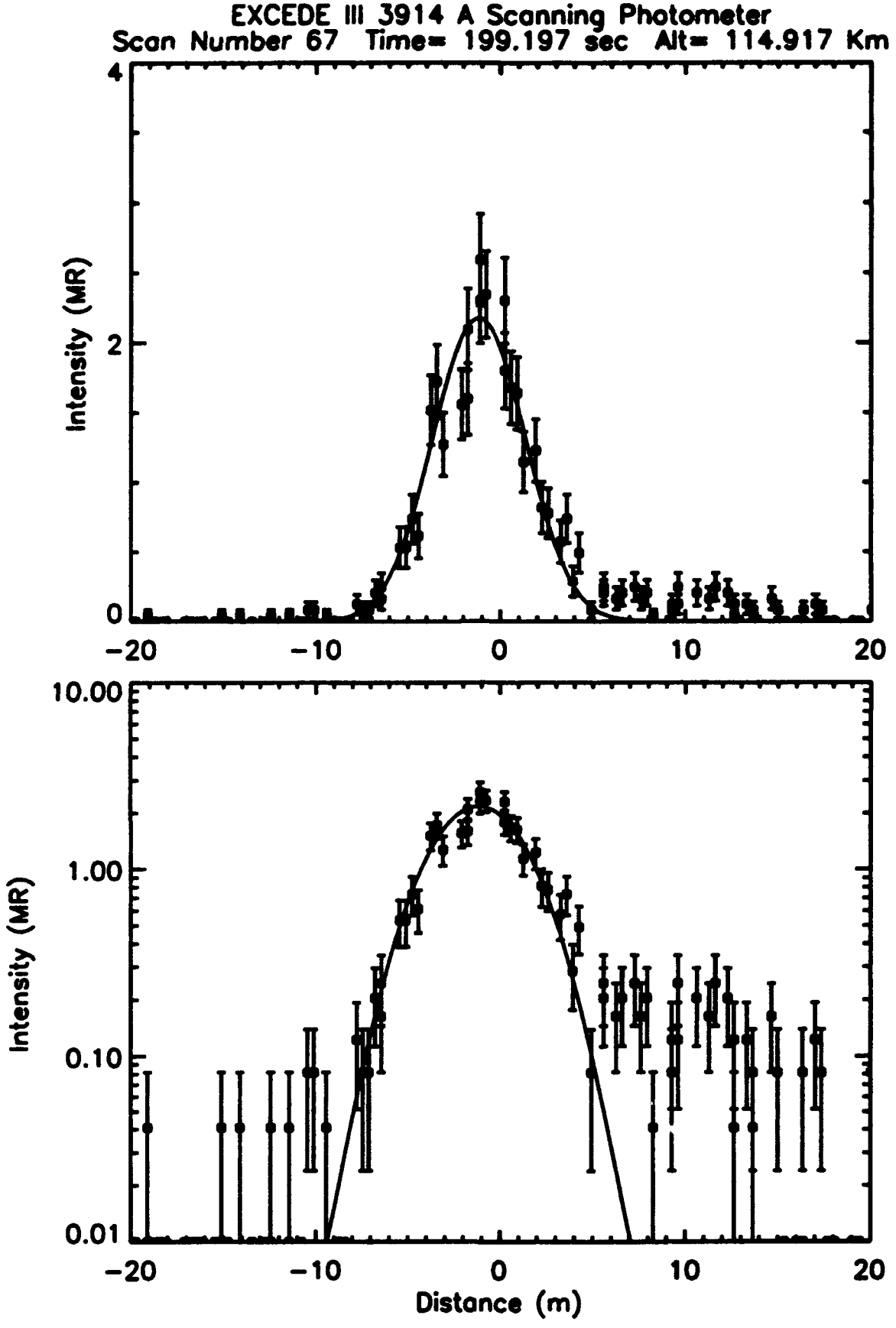

EXCEDE III 3914 A Scanning Photometer
Scan Number 62 Time= 194.616 sec Alt= 114.999 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

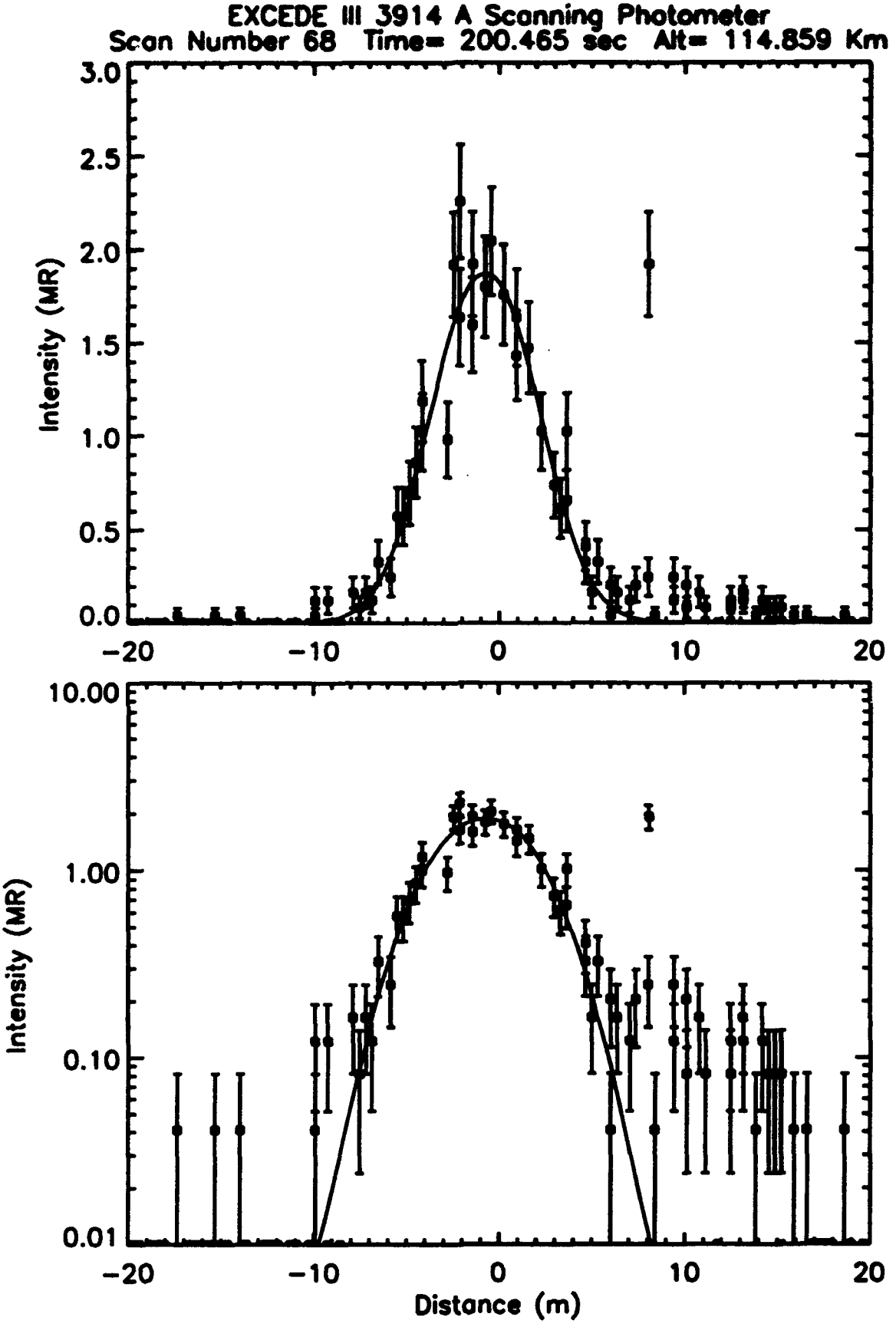

EXCEDE III 3914 A Scanning Photometer
Scan Number 63 Time= 195.292 sec Alt= 115.000 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

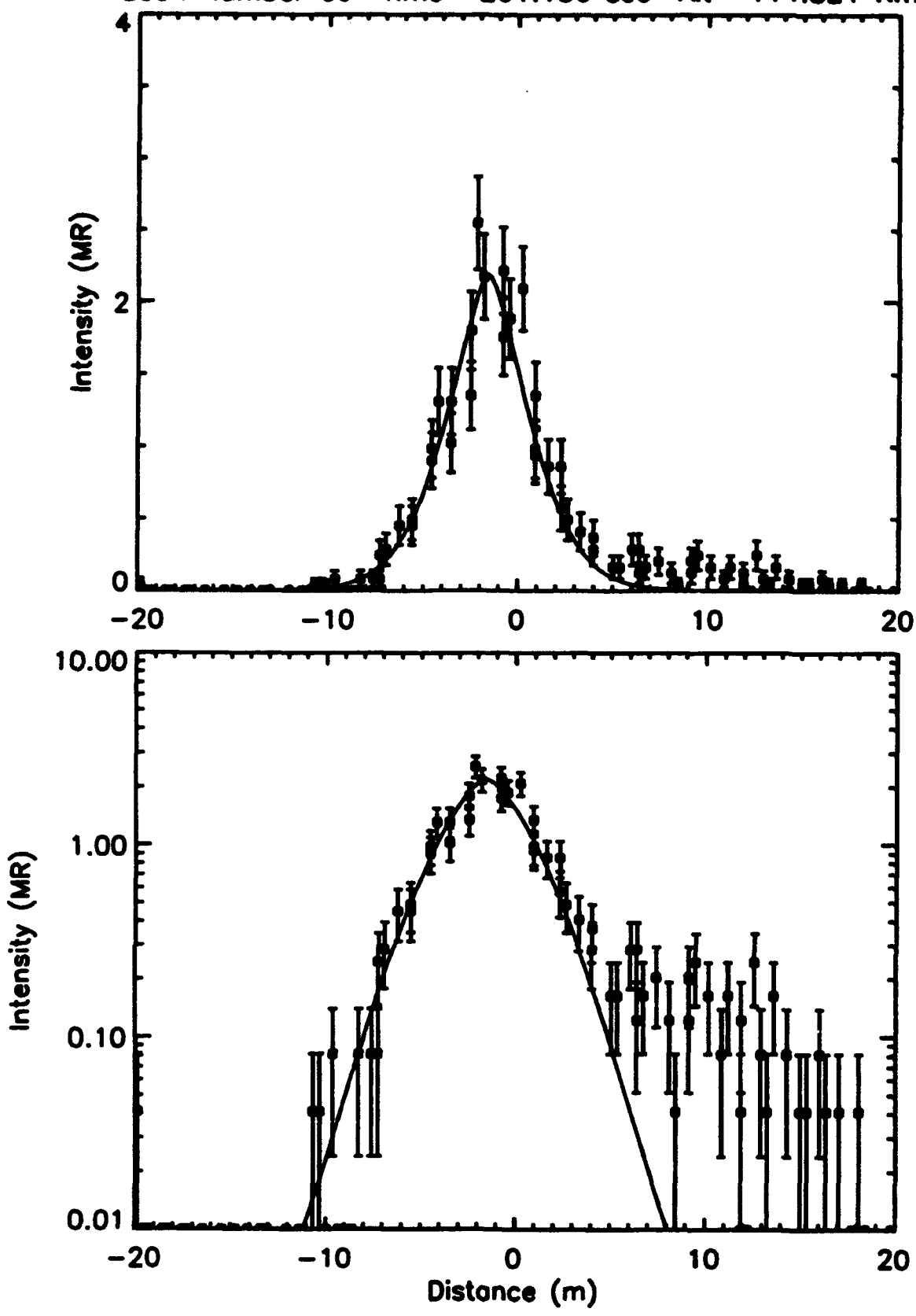

EXCEDE III 3914 A Scanning Photometer
Scan Number 64 Time= 196.428 sec Alt= 114.990 Km
0.50
0.40
0.30
0.20
0.10
0.00
Intensity (MR)
−20
−10
0
10
20
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

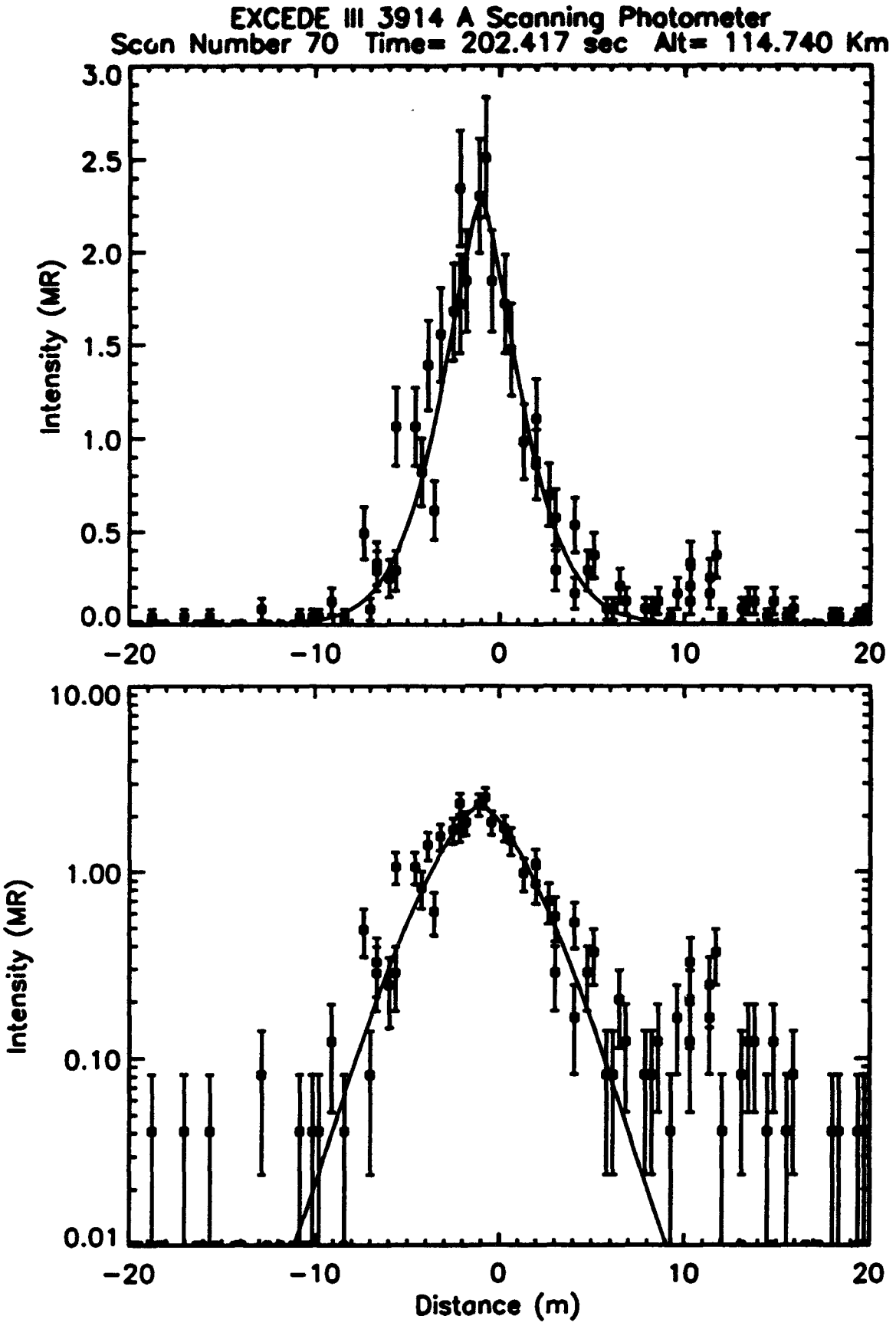

EXCEDE III 3914 A Scanning Photometer
Scan Number 65 Time= 197.387 sec Alt= 114.973 Km
0.20
0.15
0.10
0.05
0.00
Intensity (MR)
-20
-10
0
10
20
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

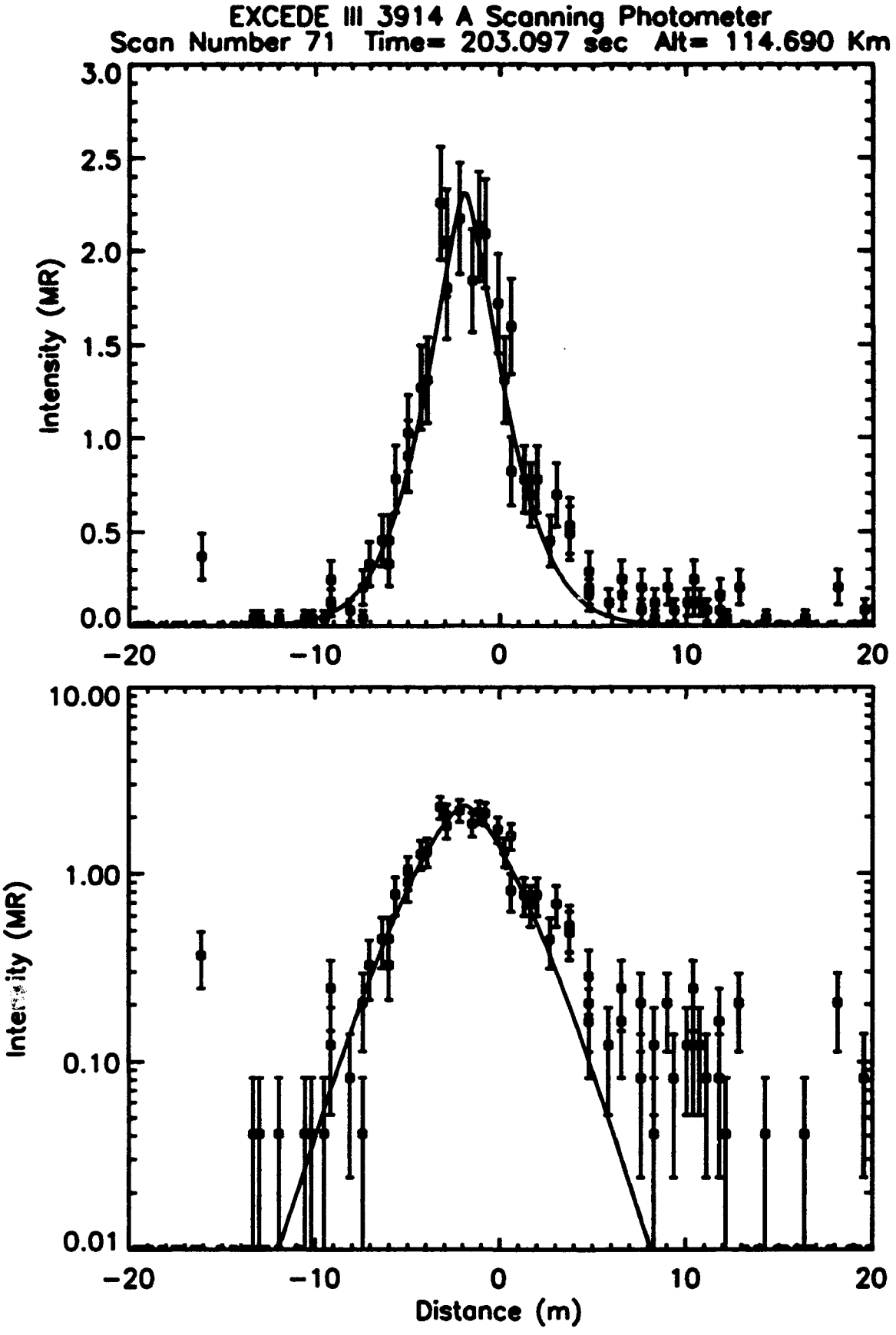

EXCEDE III 3914 A Scanning Photometer
Scan Number 66 Time= 198.531 sec Alt= 114.941 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

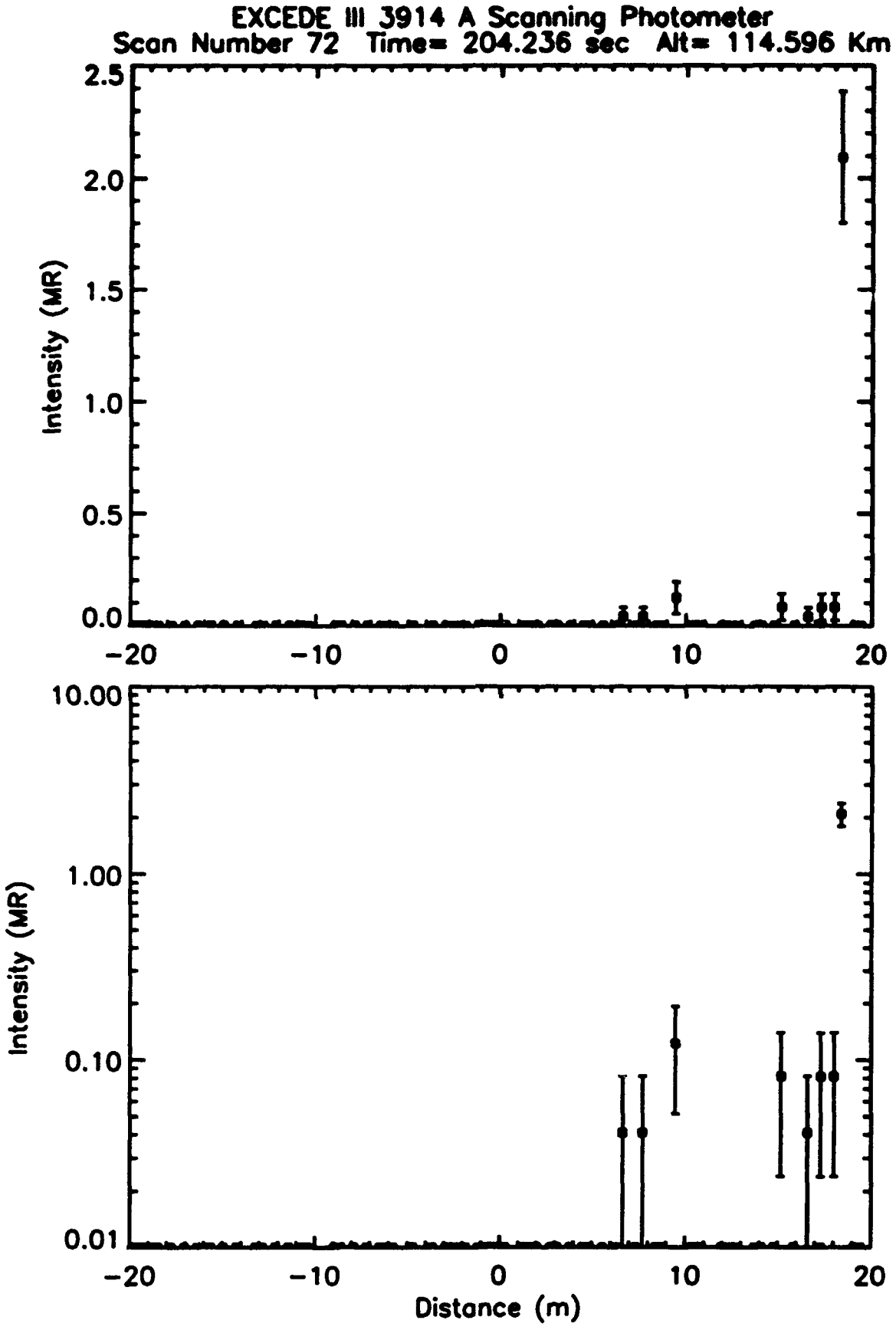

EXCEDE III 3914 A Scanning Photometer
Scan Number 67 Time= 199.197 sec Alt= 114.917 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

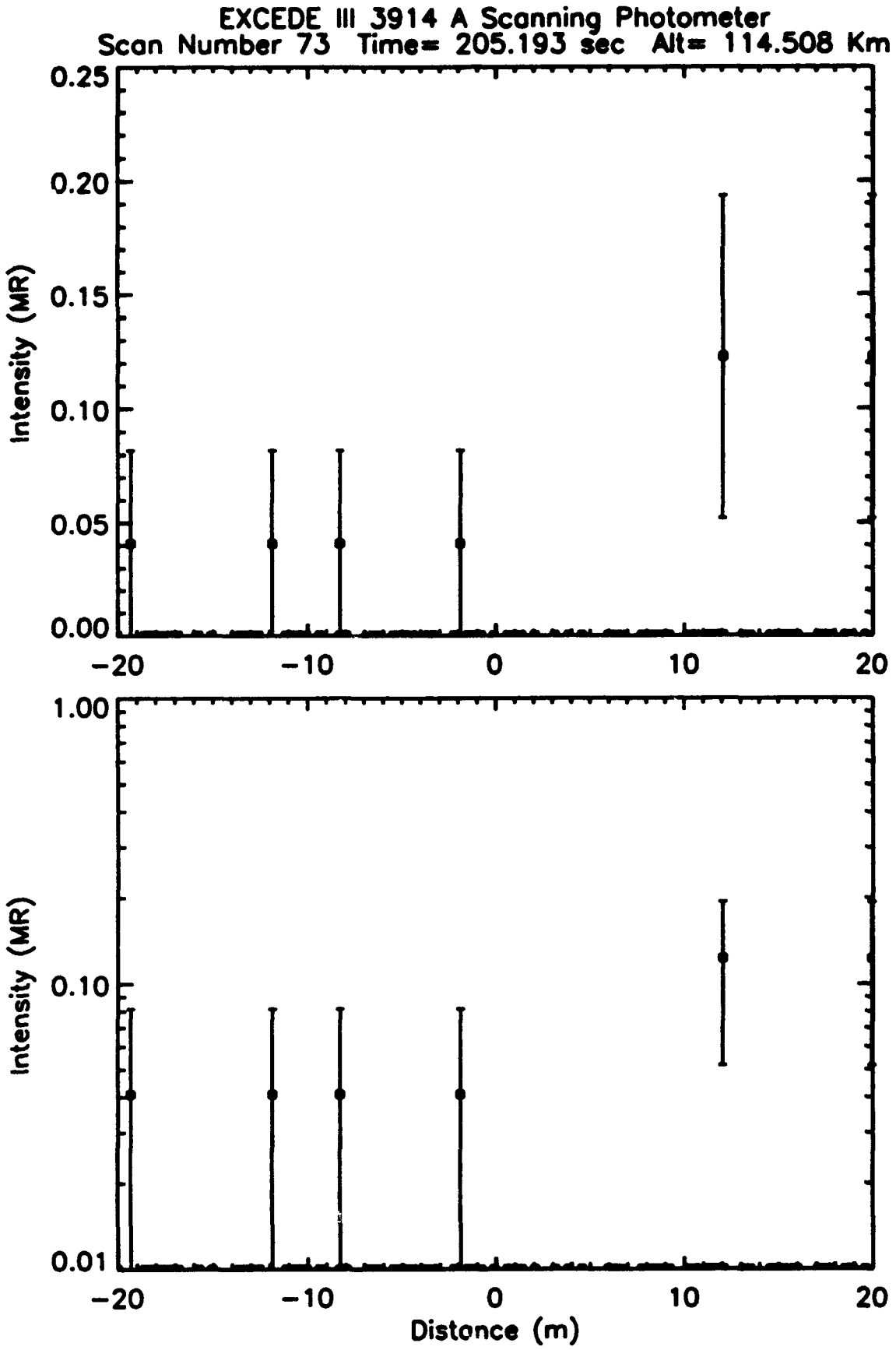

EXCEDE III 3914 A Scanning Photometer
Scan Number 68 Time= 200.465 sec Alt= 114.859 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

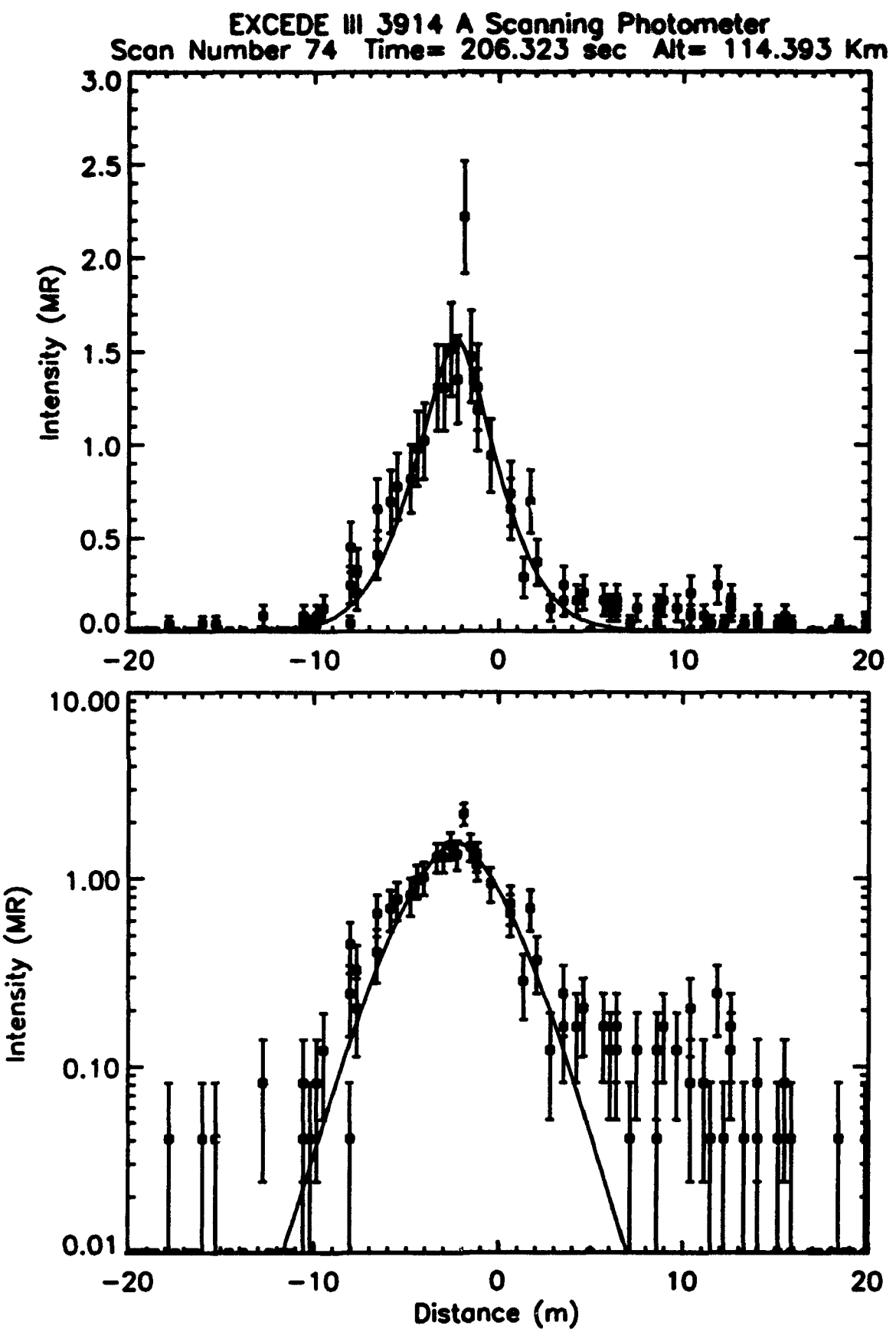

EXCEDE III 3914 A Scanning Photometer
Scan Number 69 Time= 201.150 sec Alt= 114.821 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

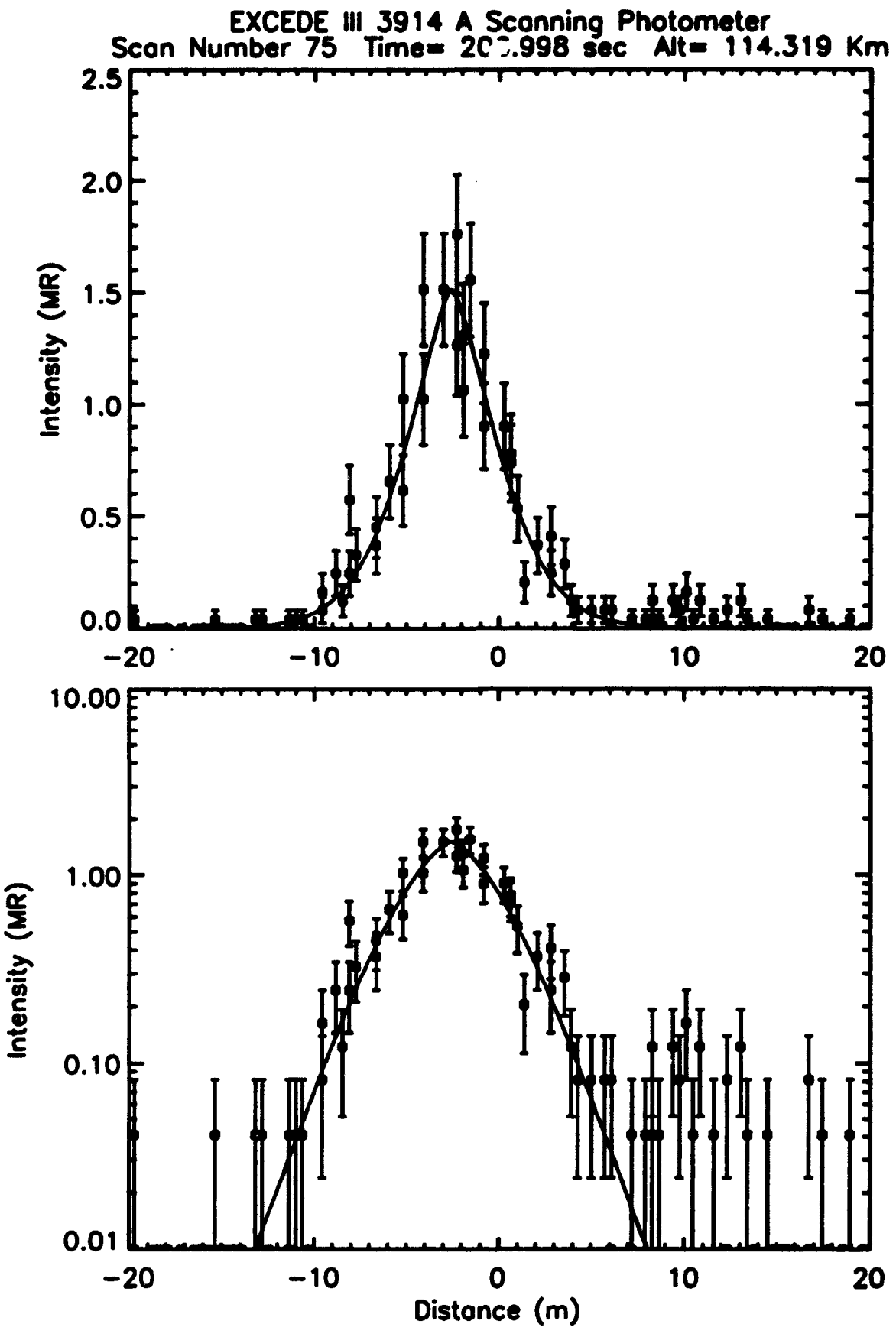

EXCEDE III 3914 A Scanning Photometer
Scan Number 70 Time= 202.417 sec Alt= 114.740 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

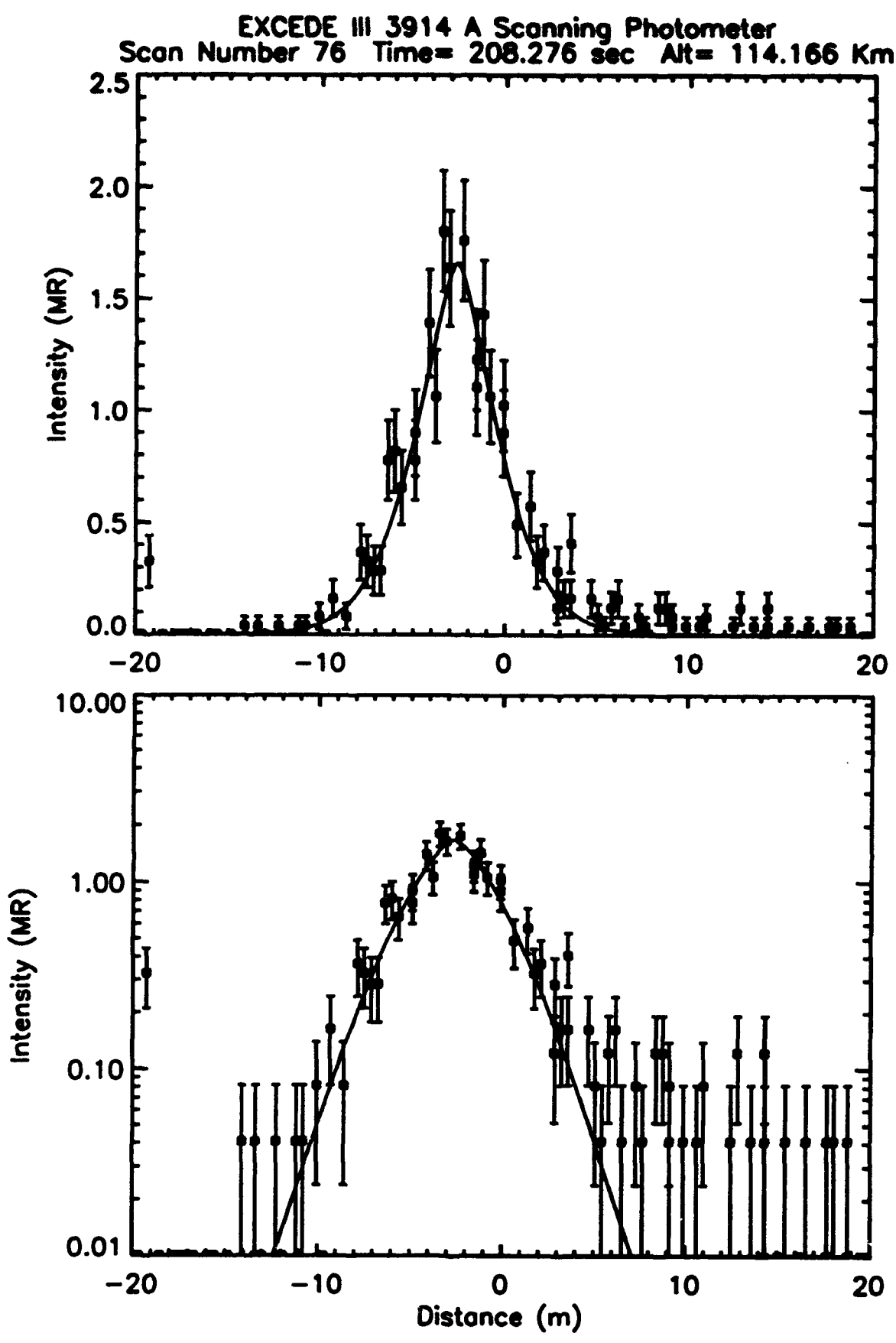

EXCEDE III 3914 A Scanning Photometer
Scan Number 71 Time= 203.097 sec Alt= 114.690 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Distance (m)

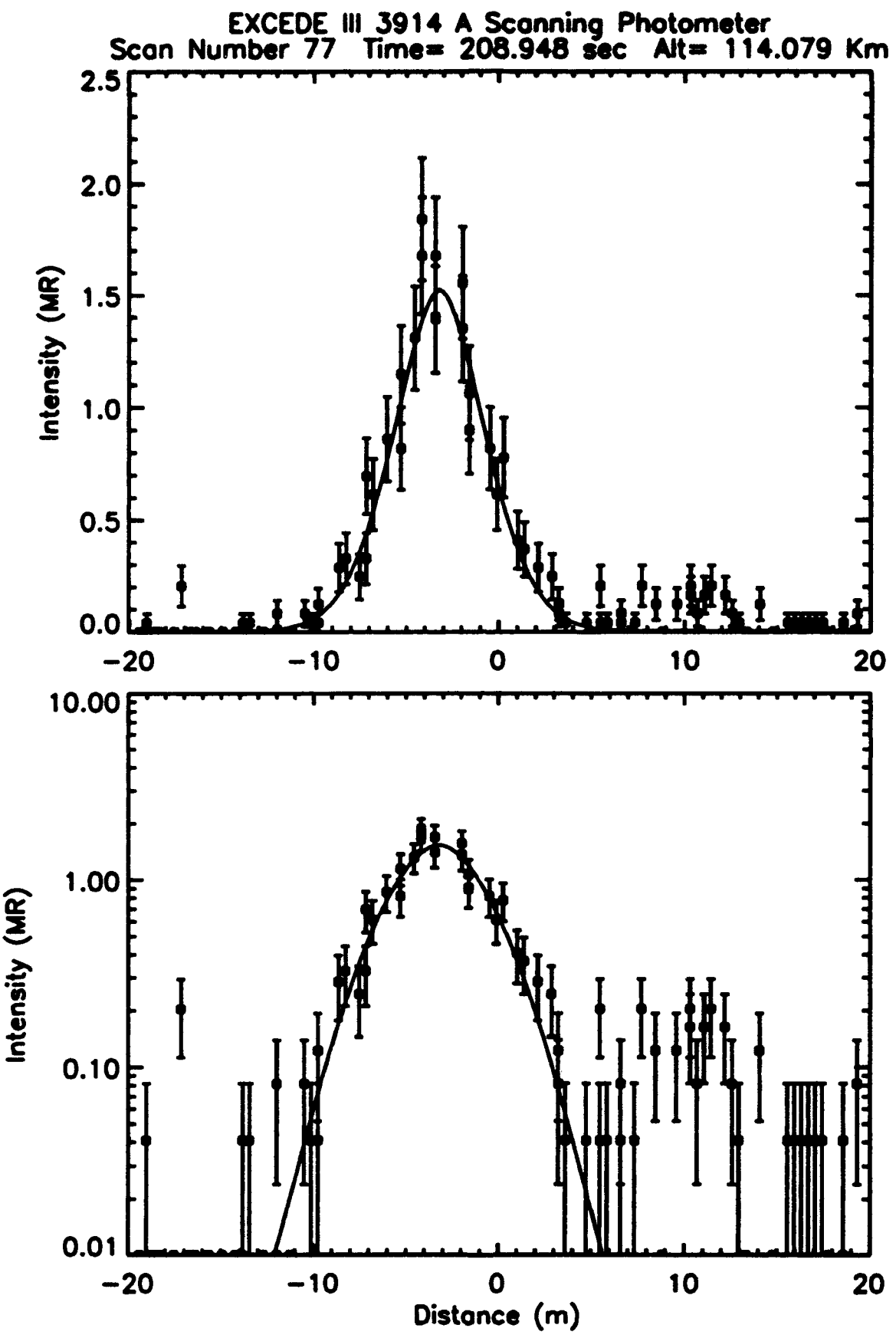

EXCEDE III 3914 A Scanning Photometer
Scan Number 72 Time= 204.236 sec Alt= 114.596 Km
Intensity (MR)
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

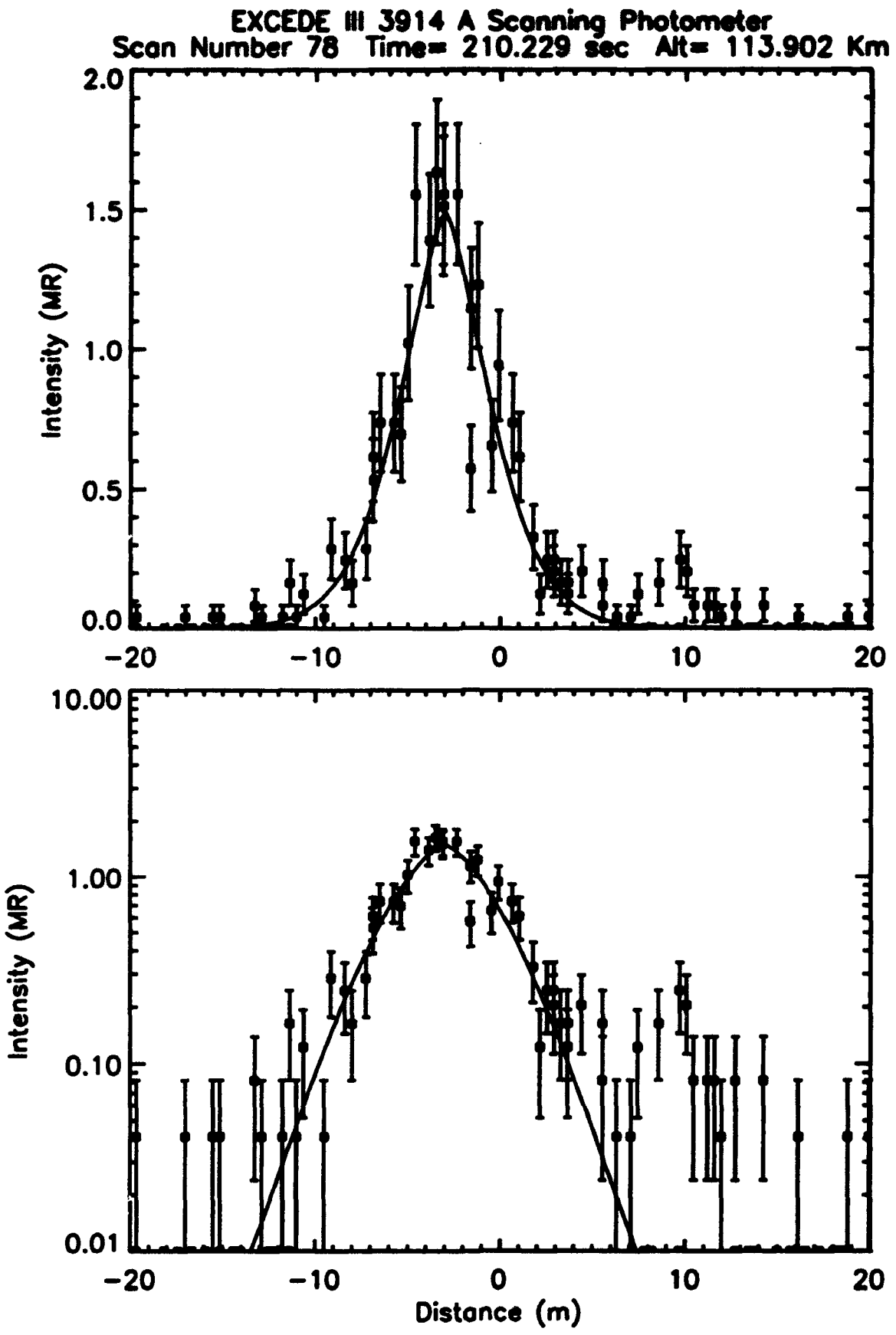

EXCEDE III 3914 A Scanning Photometer
Scan Number 73 Time= 205.193 sec Alt= 114.508 Km
Intensity (MR)
0.25
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

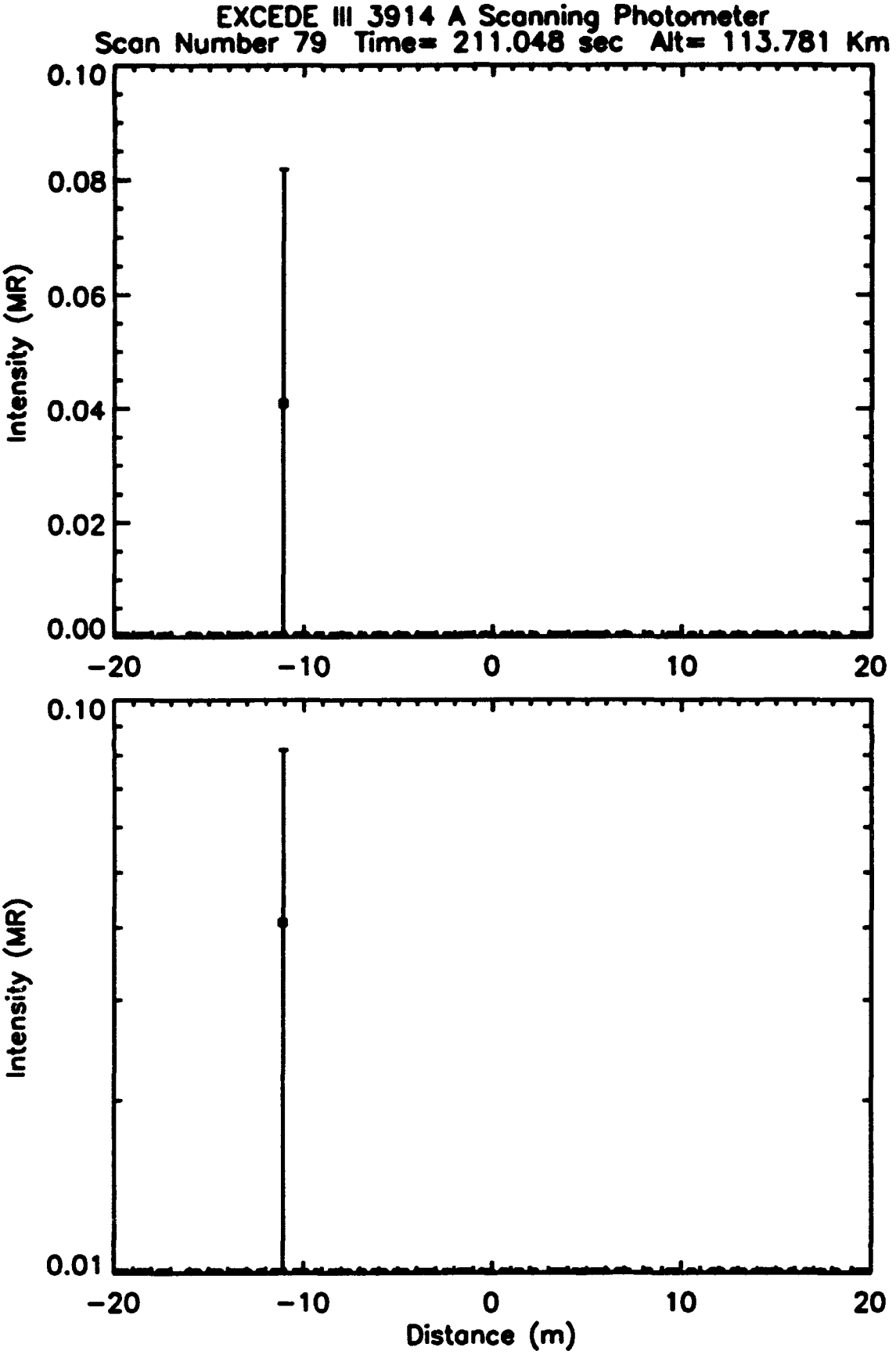

EXCEDE III 3914 A Scanning Photometer
Scan Number 74 Time= 206.323 sec Alt= 114.393 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

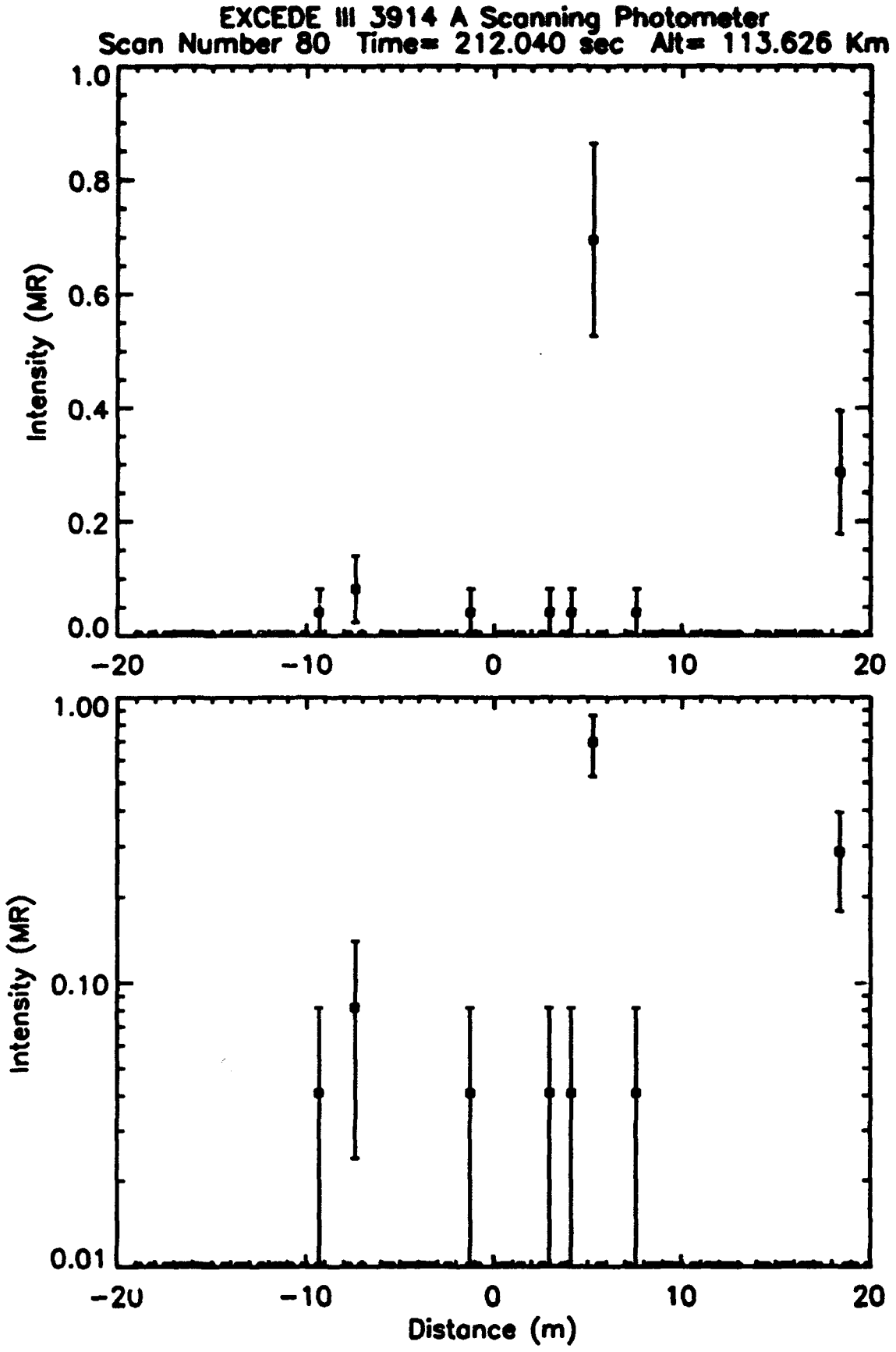

EXCEDE III 3914 A Scanning Photometer
Scan Number 75 Time= 20[illegible].998 sec Alt= 114.319 Km
Intensity (MR)
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

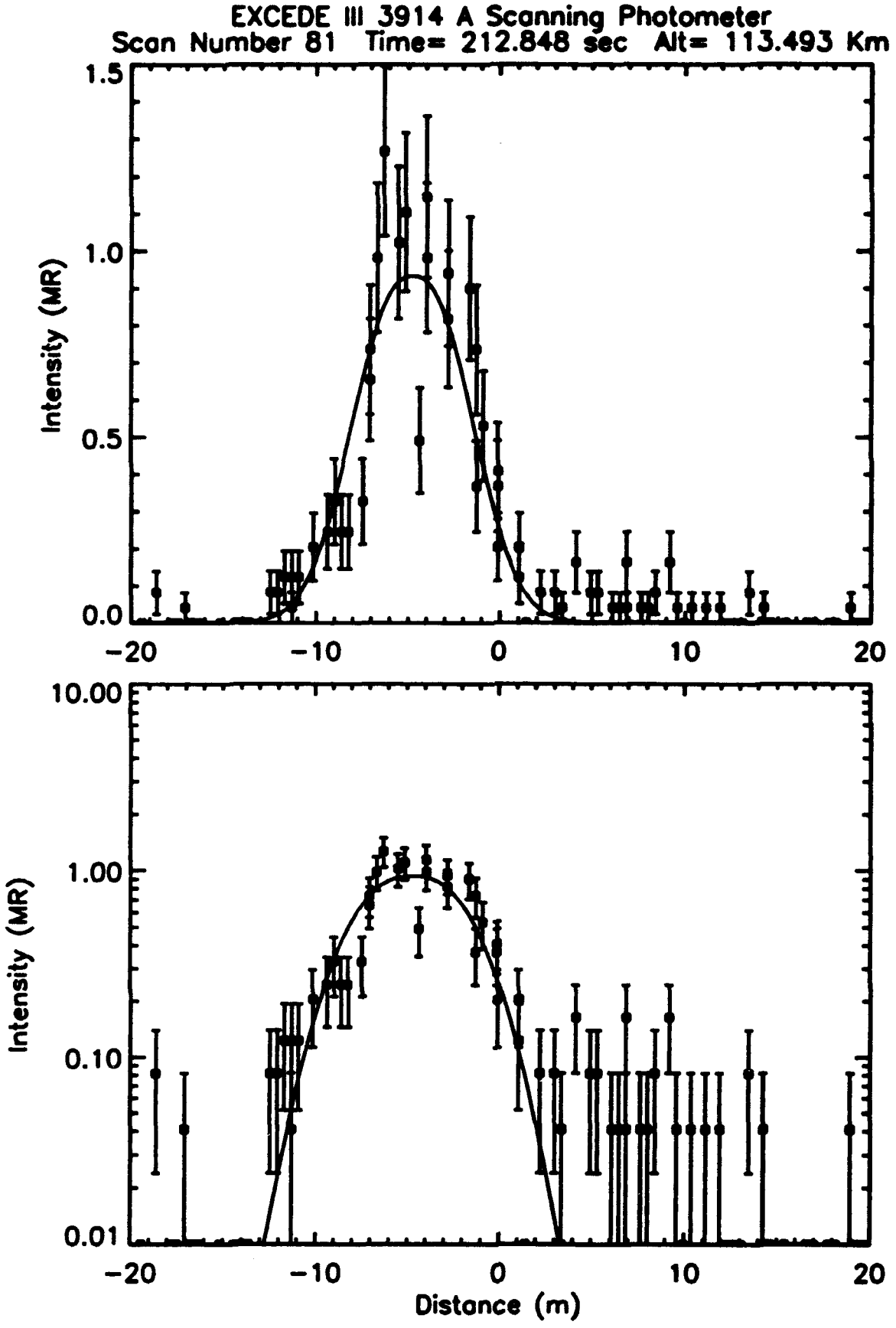

EXCEDE III 3914 A Scanning Photometer
Scan Number 76 Time= 208.276 sec Alt= 114.166 Km
Intensity (MR)
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

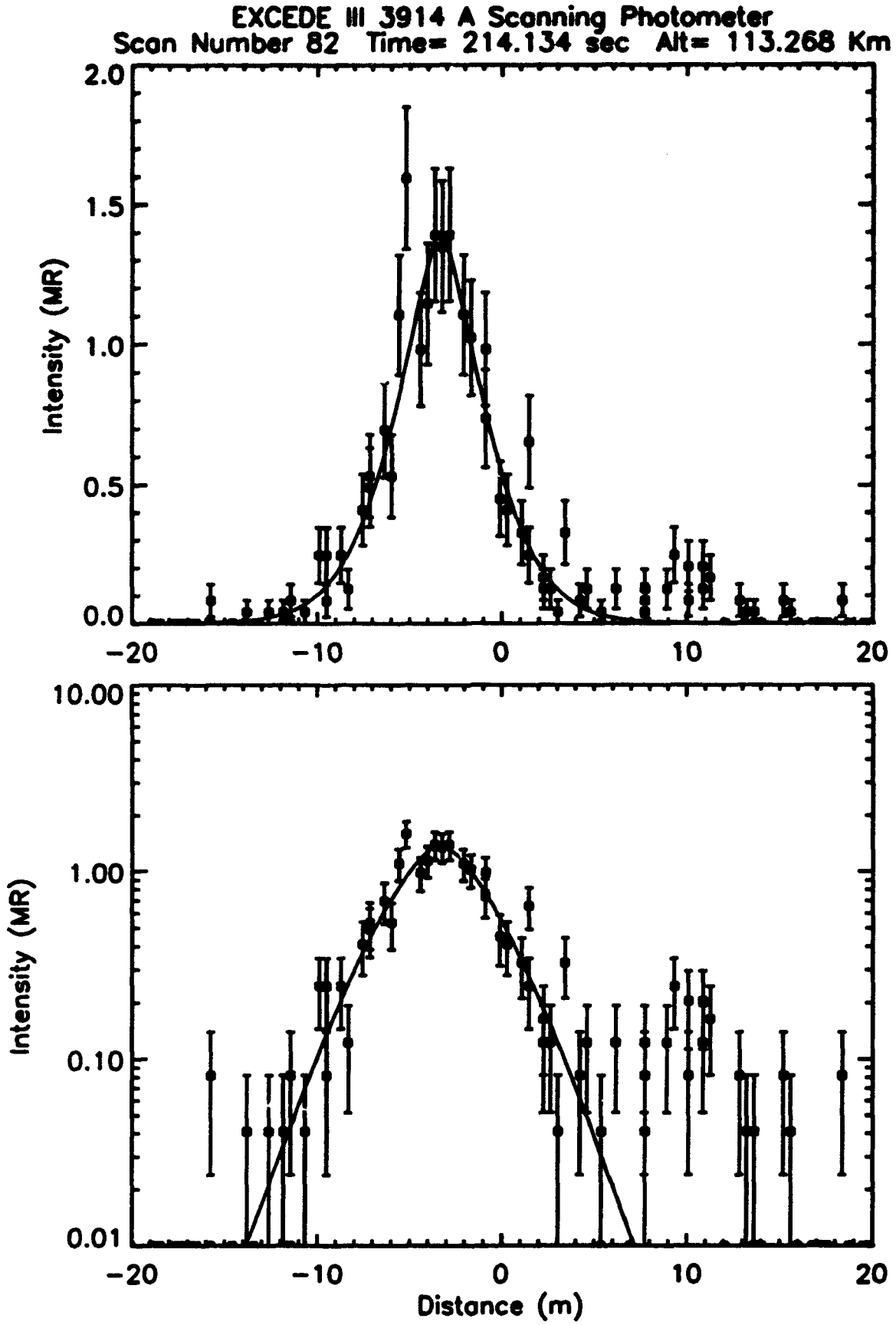

EXCEDE III 3914 A Scanning Photometer
Scan Number 77 Time= 208.948 sec Alt= 114.079 Km
Intensity (MR)
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

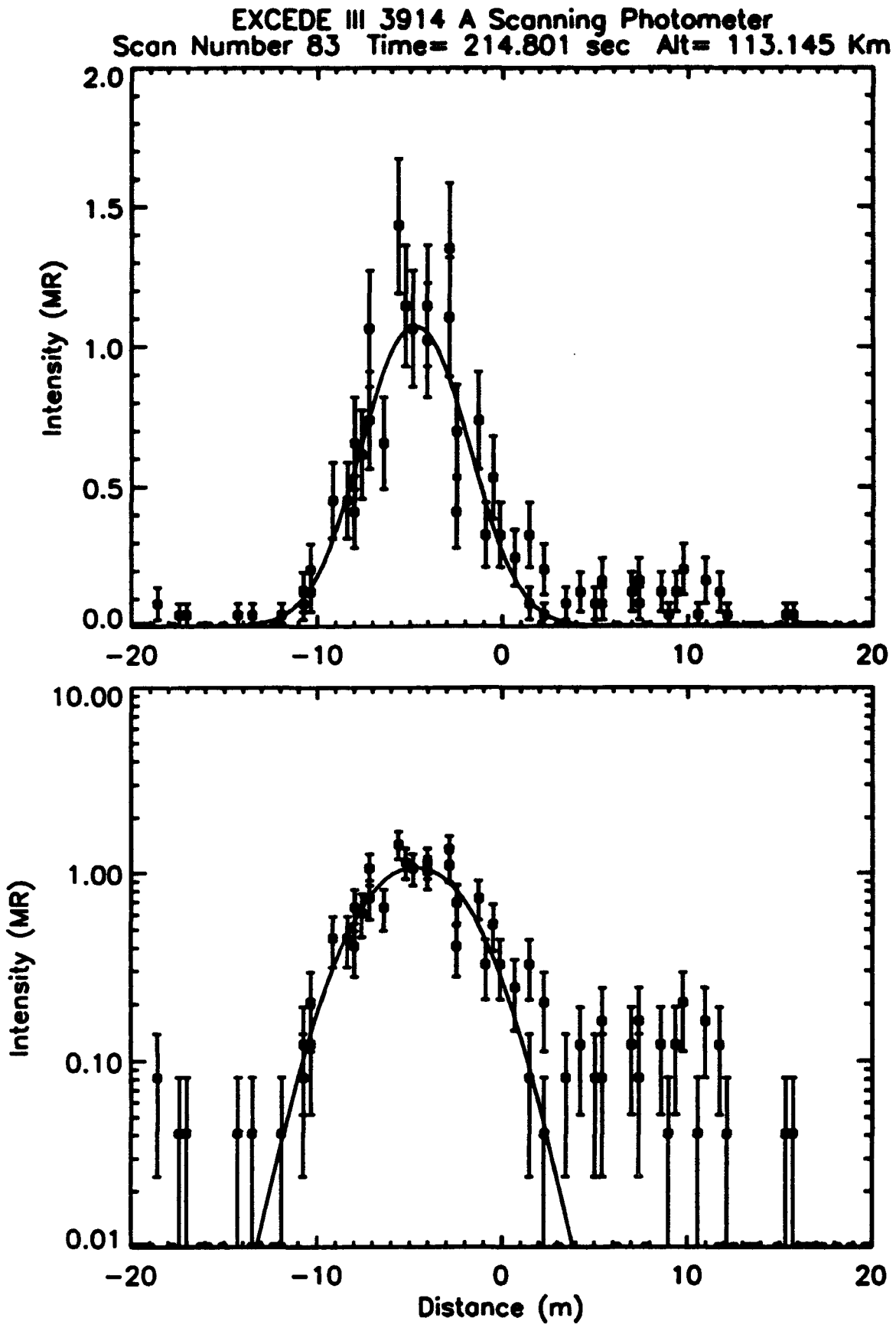

EXCEDE III 3914 A Scanning Photometer
Scan Number 78 Time= 210.229 sec Alt= 113.902 Km
Intensity (MR)
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

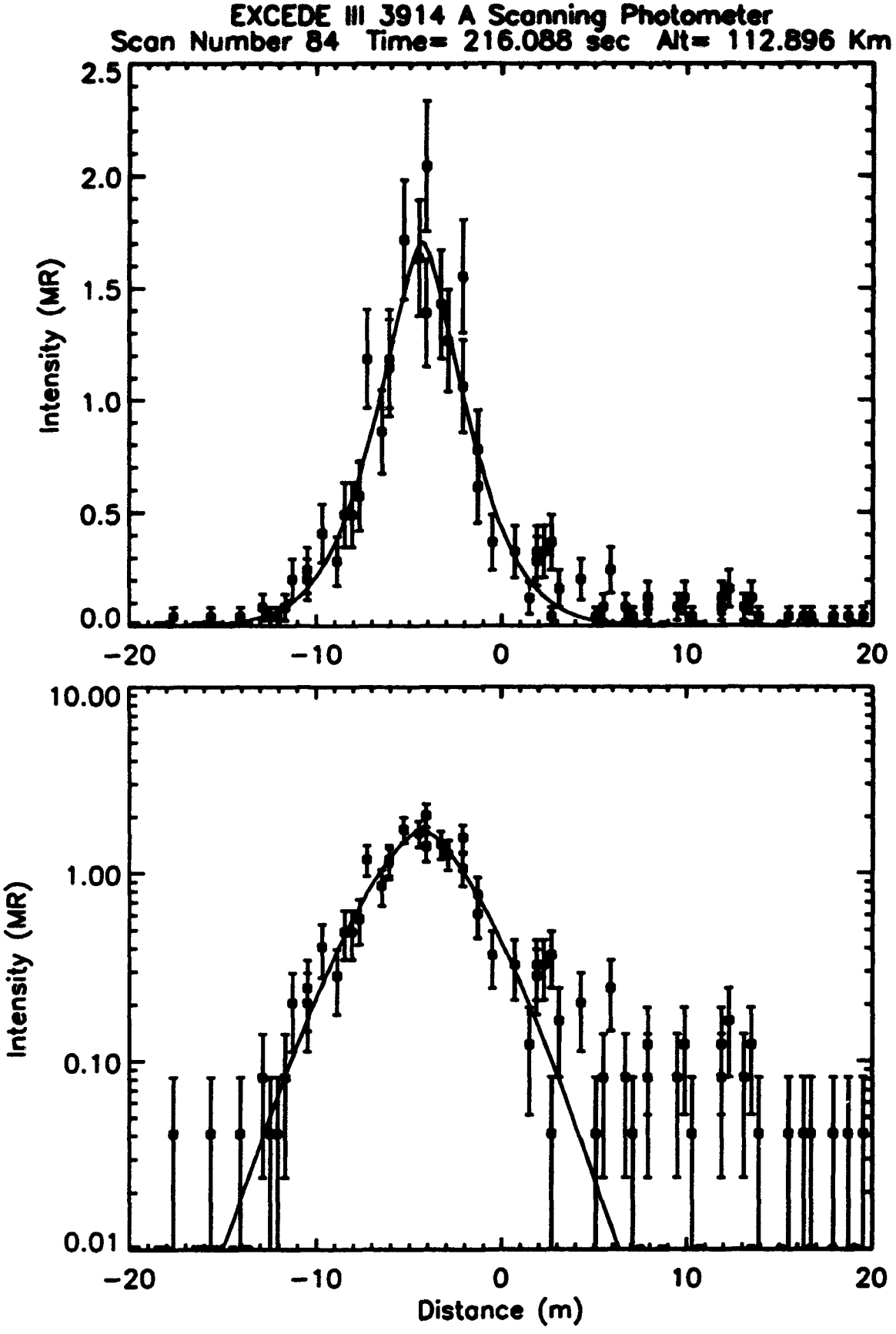

EXCEDE III 3914 A Scanning Photometer
Scan Number 79 Time= 211.048 sec Alt= 113.781 Km
0.10
0.08
0.06
0.04
0.02
0.00
Intensity (MR)
−20
−10
0
10
20
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

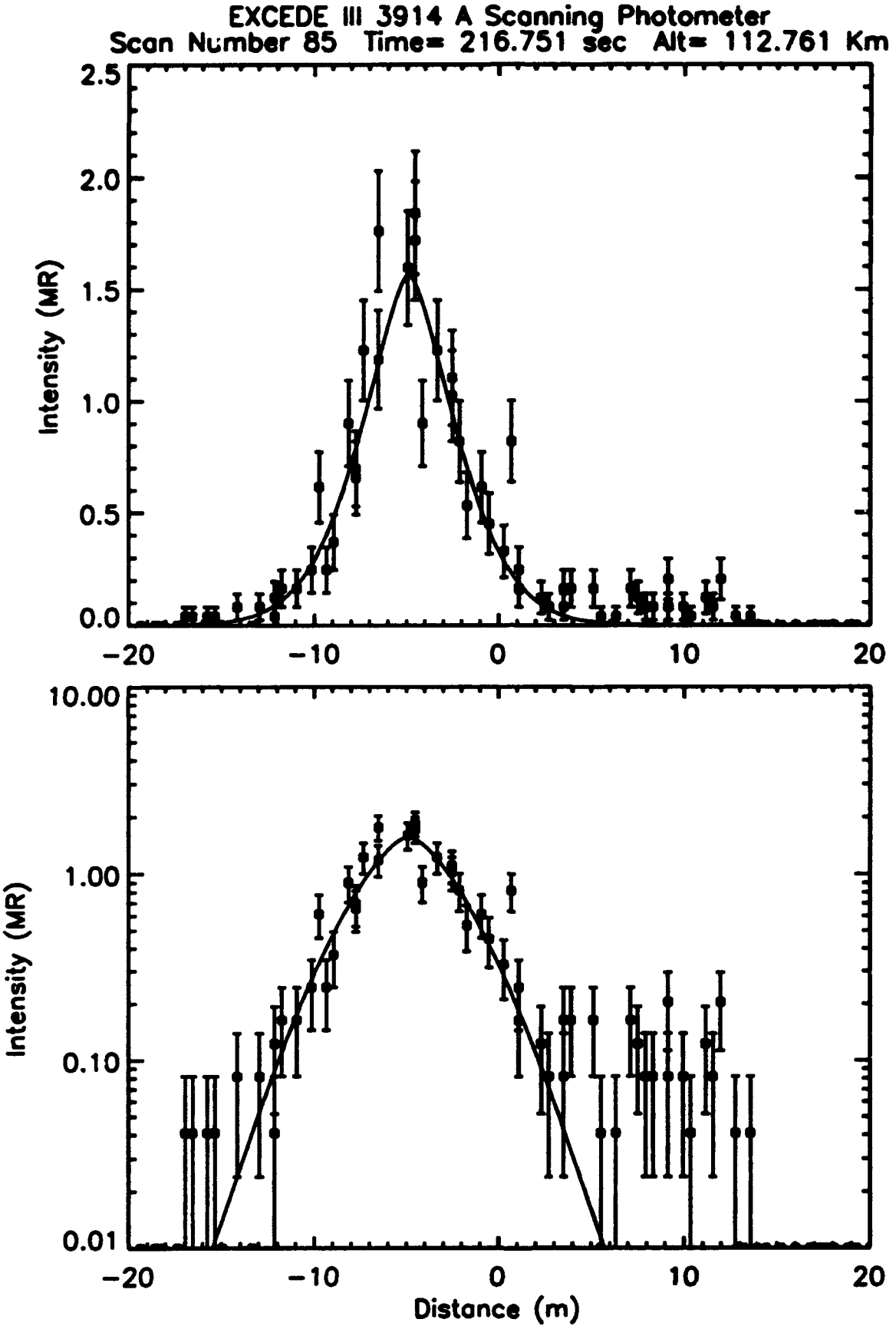

EXCEDE III 3914 A Scanning Photometer
Scan Number 80 Time= 212.040 sec Alt= 113.626 Km
Intensity (MR)
1.0
0.8
0.6
0.4
0.2
0.0
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

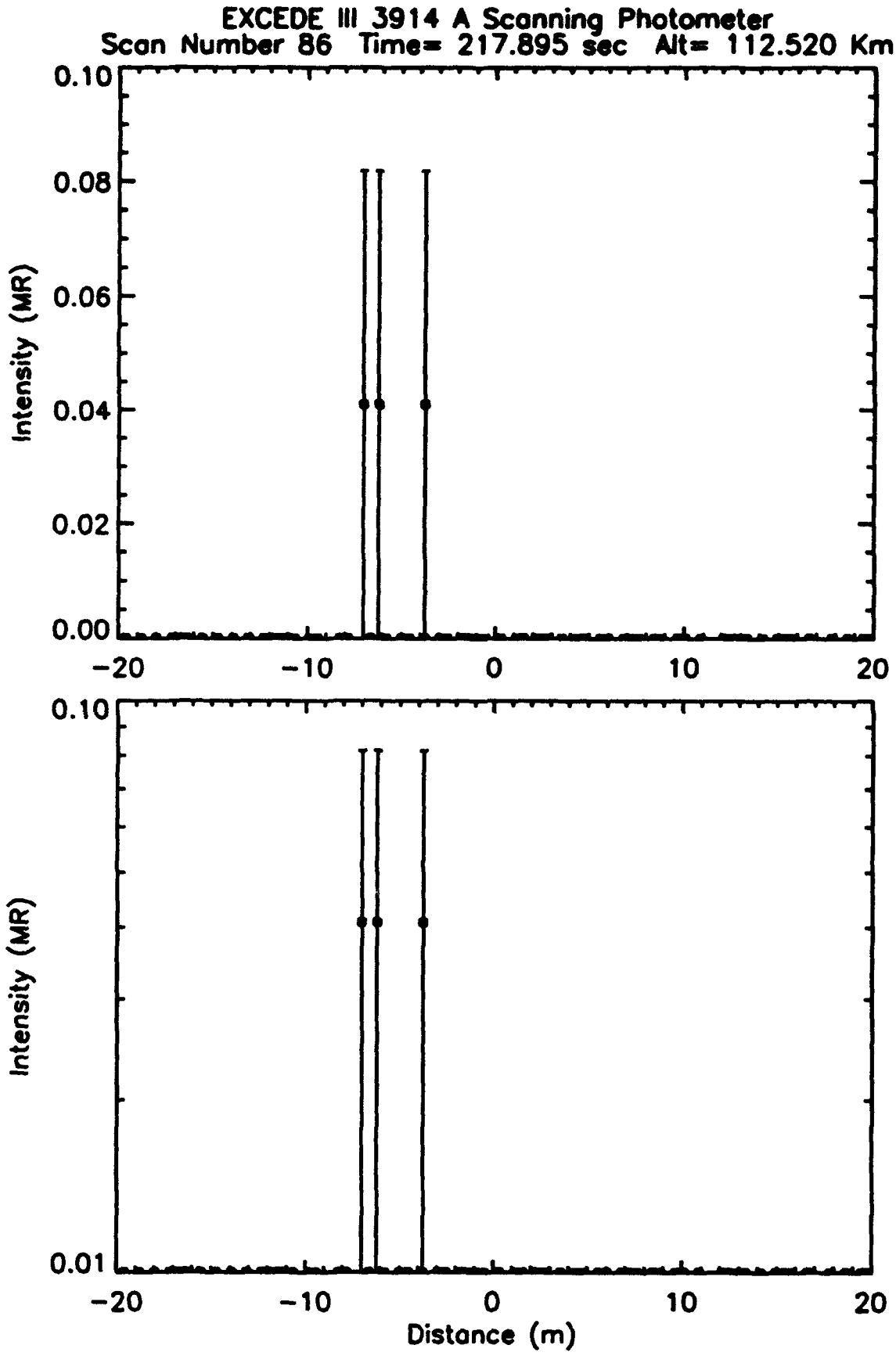

EXCEDE III 3914 A Scanning Photometer
Scan Number 81 Time= 212.848 sec Alt= 113.493 Km
Intensity (MR)
1.5
1.0
0.5
0.0
-20
-10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
-20
-10
0
10
20
Distance (m)

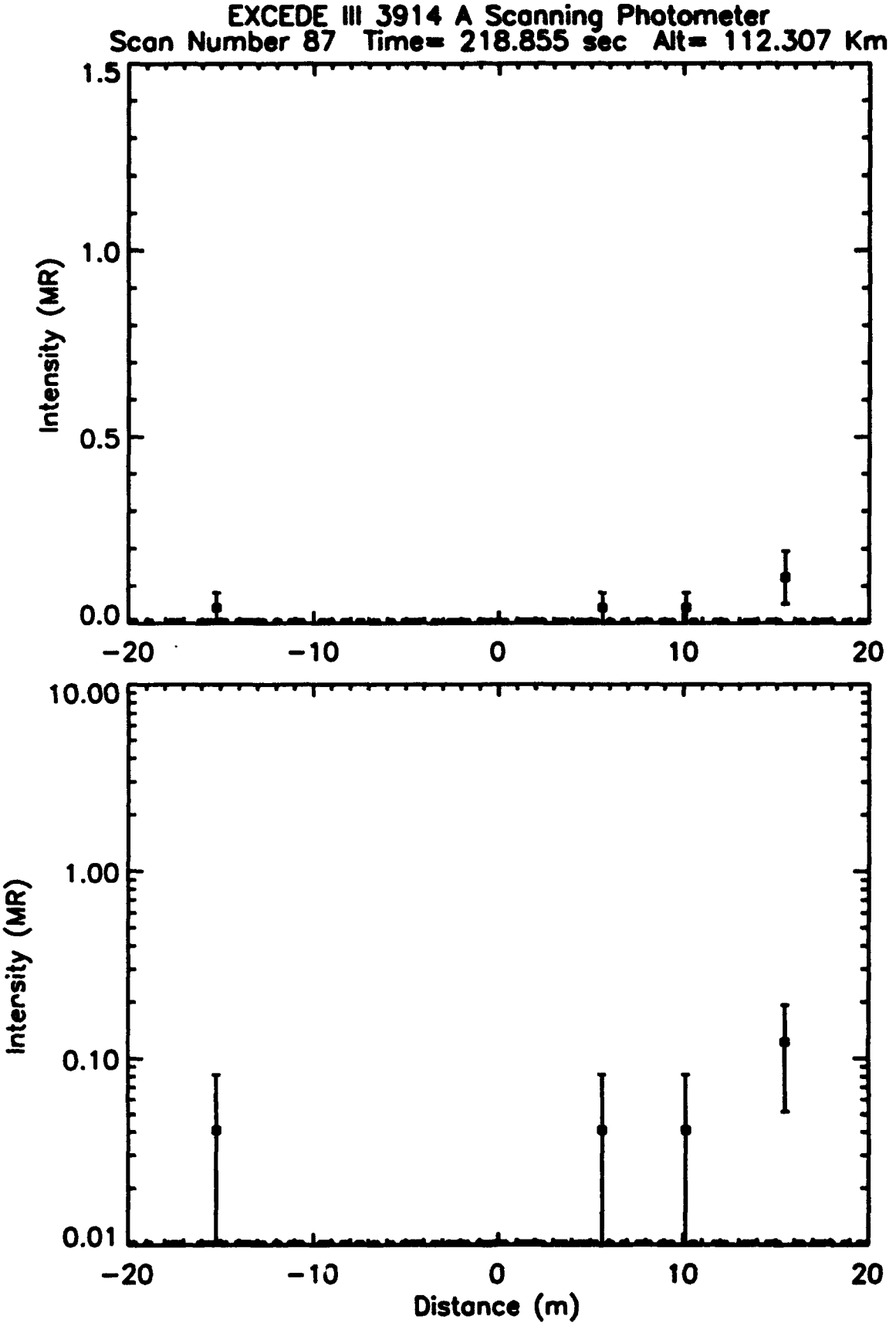

EXCEDE III 3914 A Scanning Photometer
Scan Number 82 Time= 214.134 sec Alt= 113.268 Km
Intensity (MR)
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

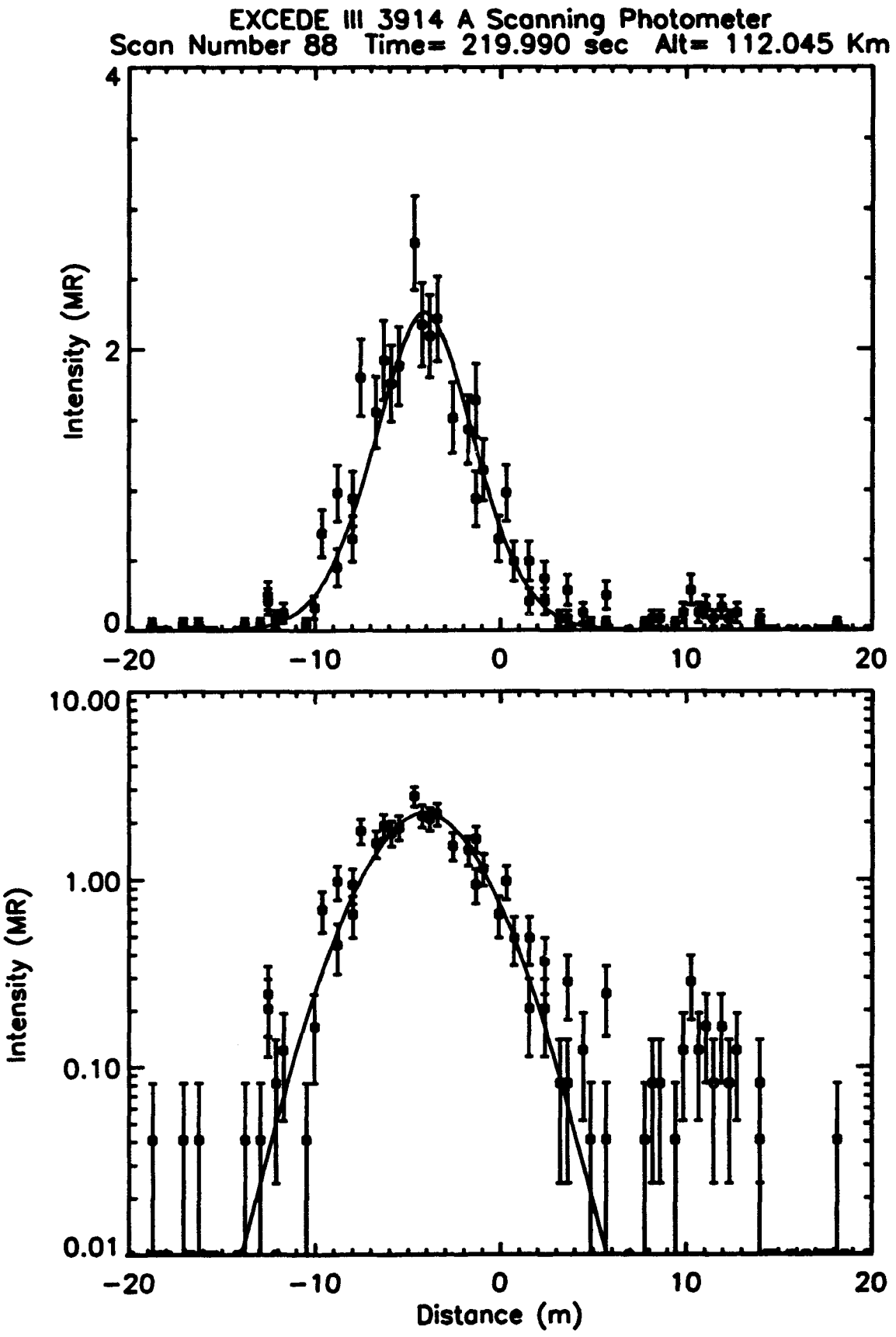

EXCEDE III 3914 A Scanning Photometer
Scan Number 83 Time= 214.801 sec Alt= 113.145 Km
Intensity (MR)
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

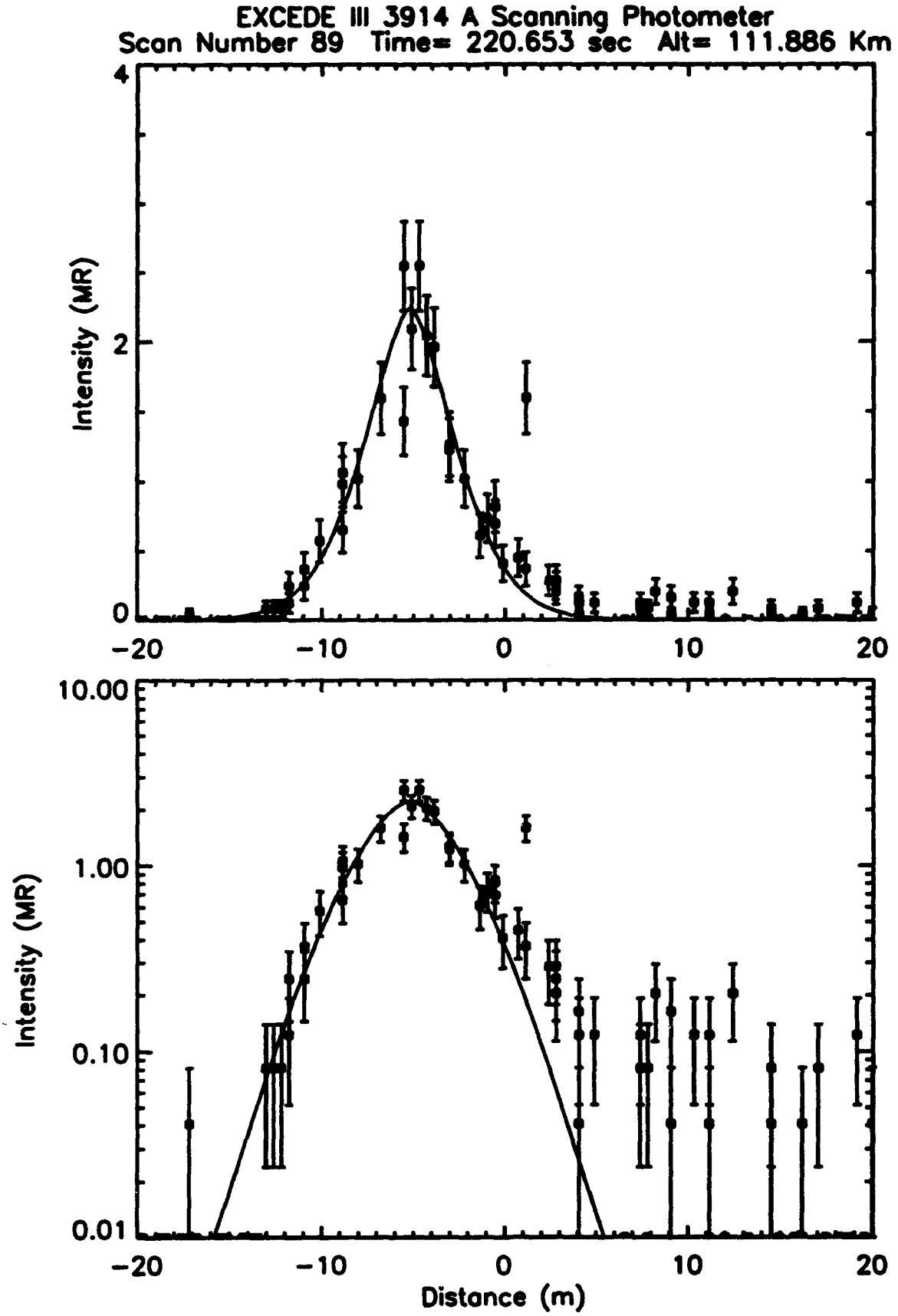

EXCEDE III 3914 A Scanning Photometer
Scan Number 84 Time= 216.088 sec Alt= 112.896 Km
Intensity (MR)
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

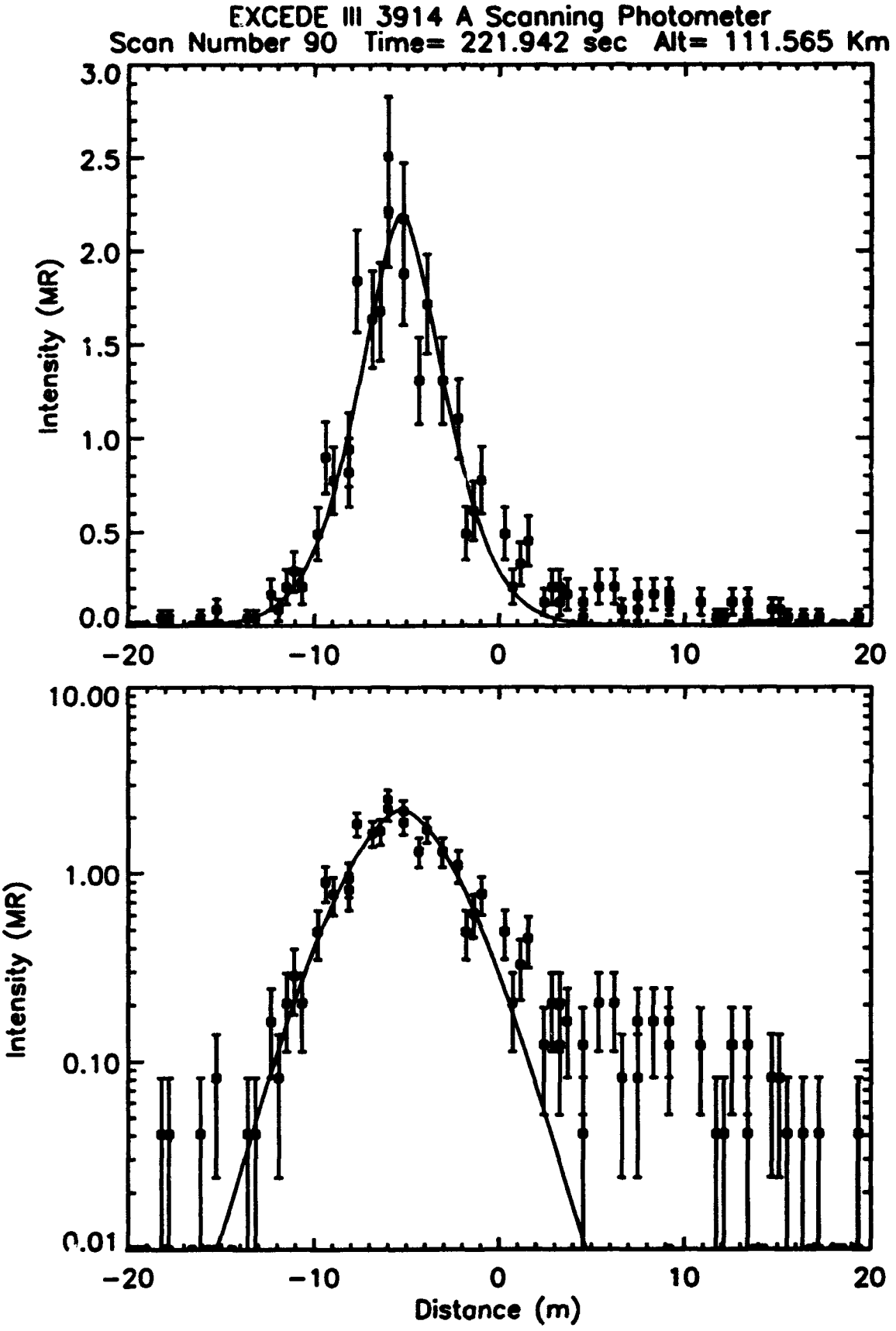

EXCEDE III 3914 A Scanning Photometer
Scan Number 85 Time= 216.751 sec Alt= 112.761 Km
Intensity (MR)
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

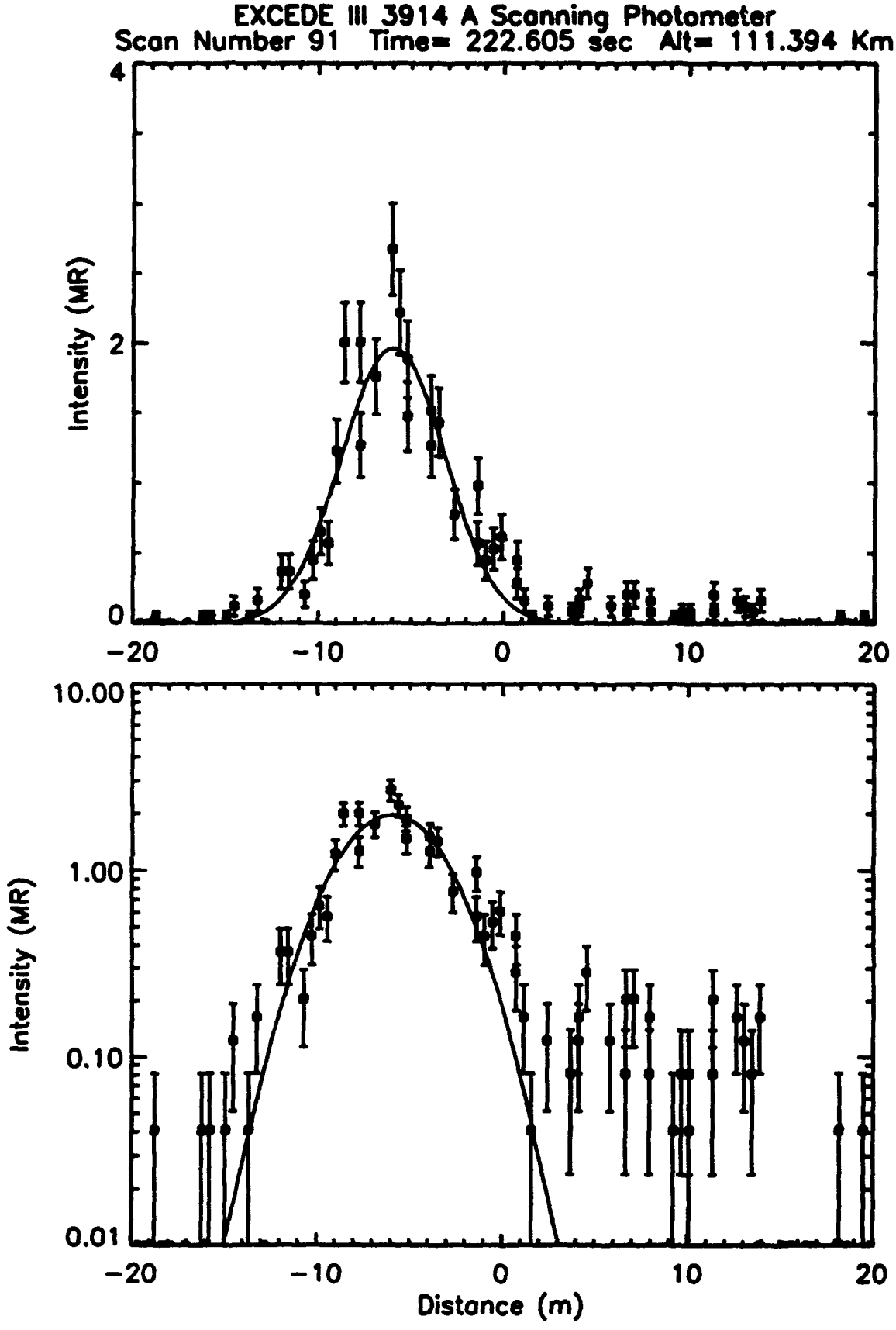

EXCEDE III 3914 A Scanning Photometer
Scan Number 86 Time= 217.895 sec Alt= 112.520 Km
Intensity (MR)
0.10
0.08
0.06
0.04
0.02
0.00
−20
−10
0
10
20
Intensity (MR)
0.10
0.01
−20
−10
0
10
20
Distance (m)

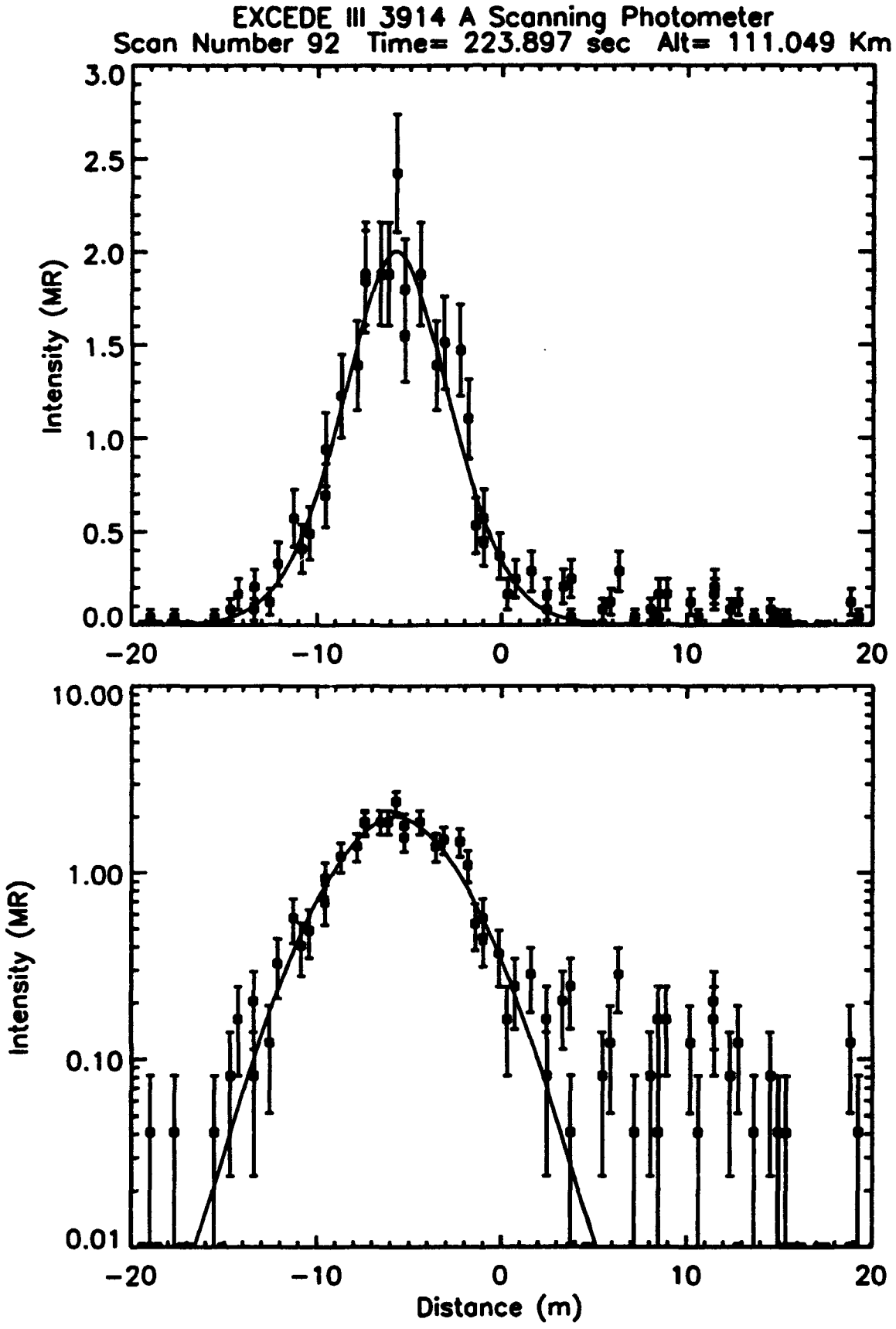

EXCEDE III 3914 A Scanning Photometer
Scan Number 87 Time= 218.855 sec Alt= 112.307 Km
Intensity (MR)
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

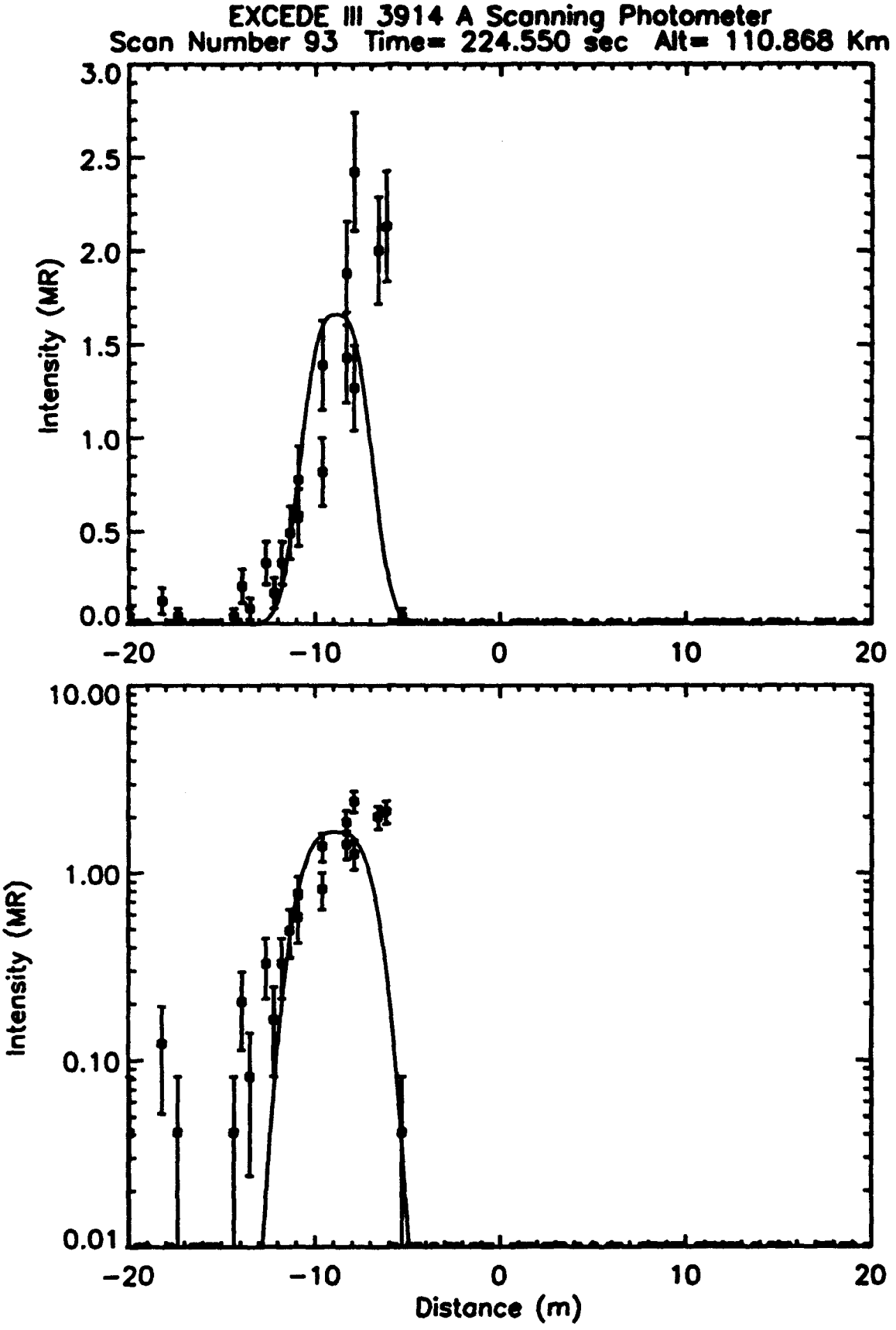

EXCEDE III 3914 A Scanning Photometer
Scan Number 88 Time= 219.990 sec Alt= 112.045 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

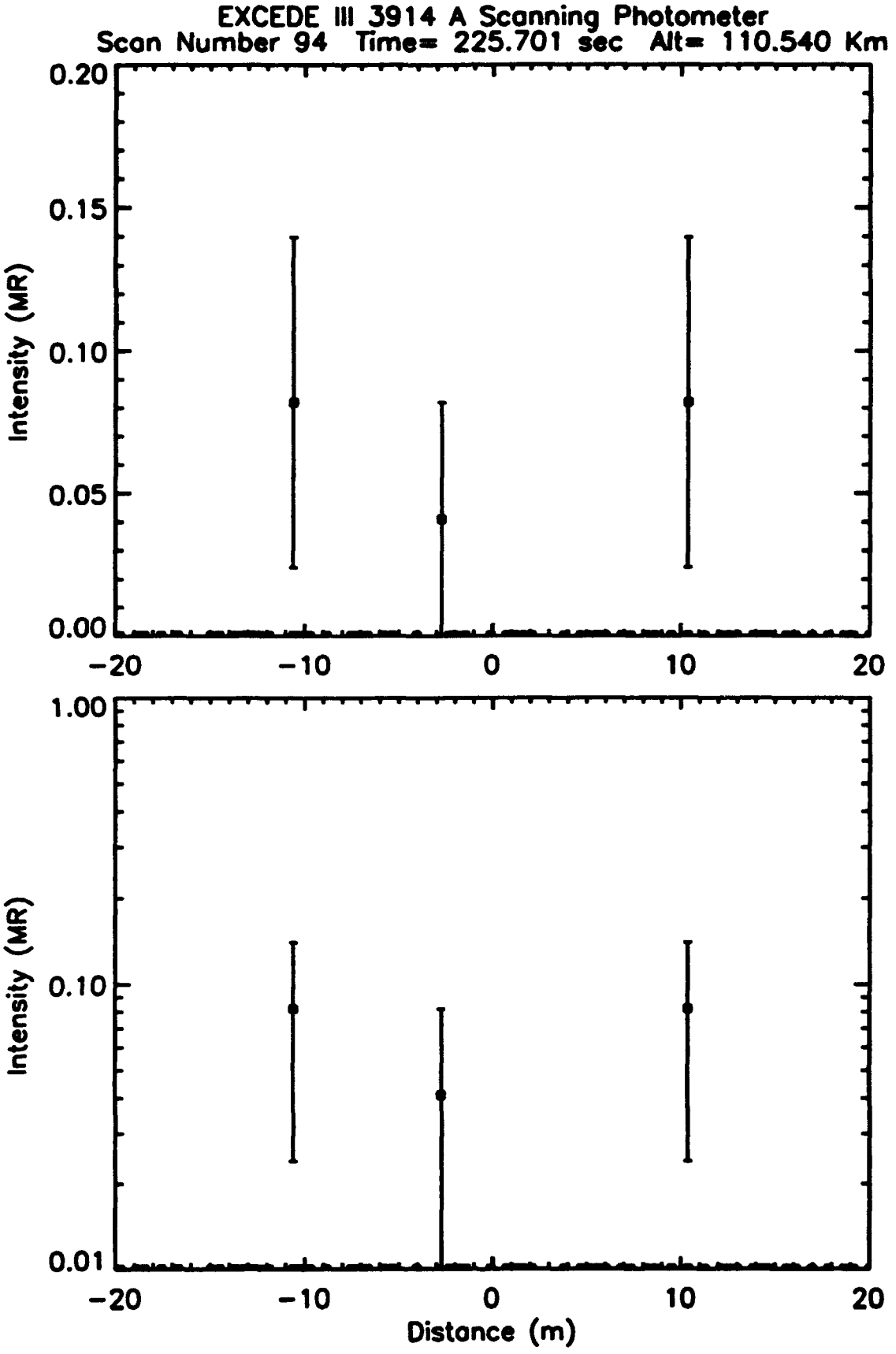

EXCEDE III 3914 A Scanning Photometer
Scan Number 89 Time= 220.653 sec Alt= 111.886 Km
Intensity (MR)
4
2
0
-20
-10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

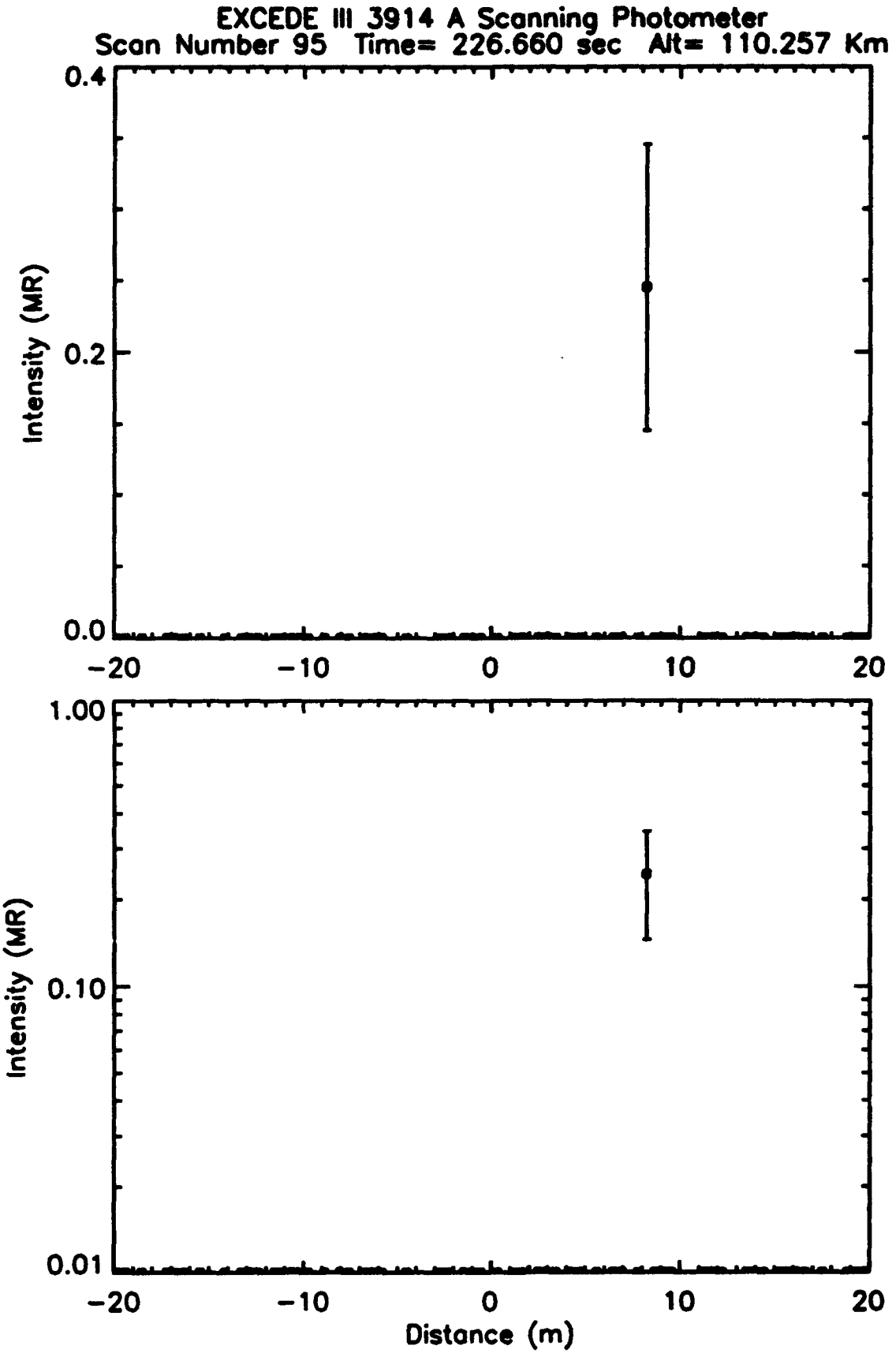

EXCEDE III 3914 A Scanning Photometer
Scan Number 90 Time= 221.942 sec Alt= 111.565 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

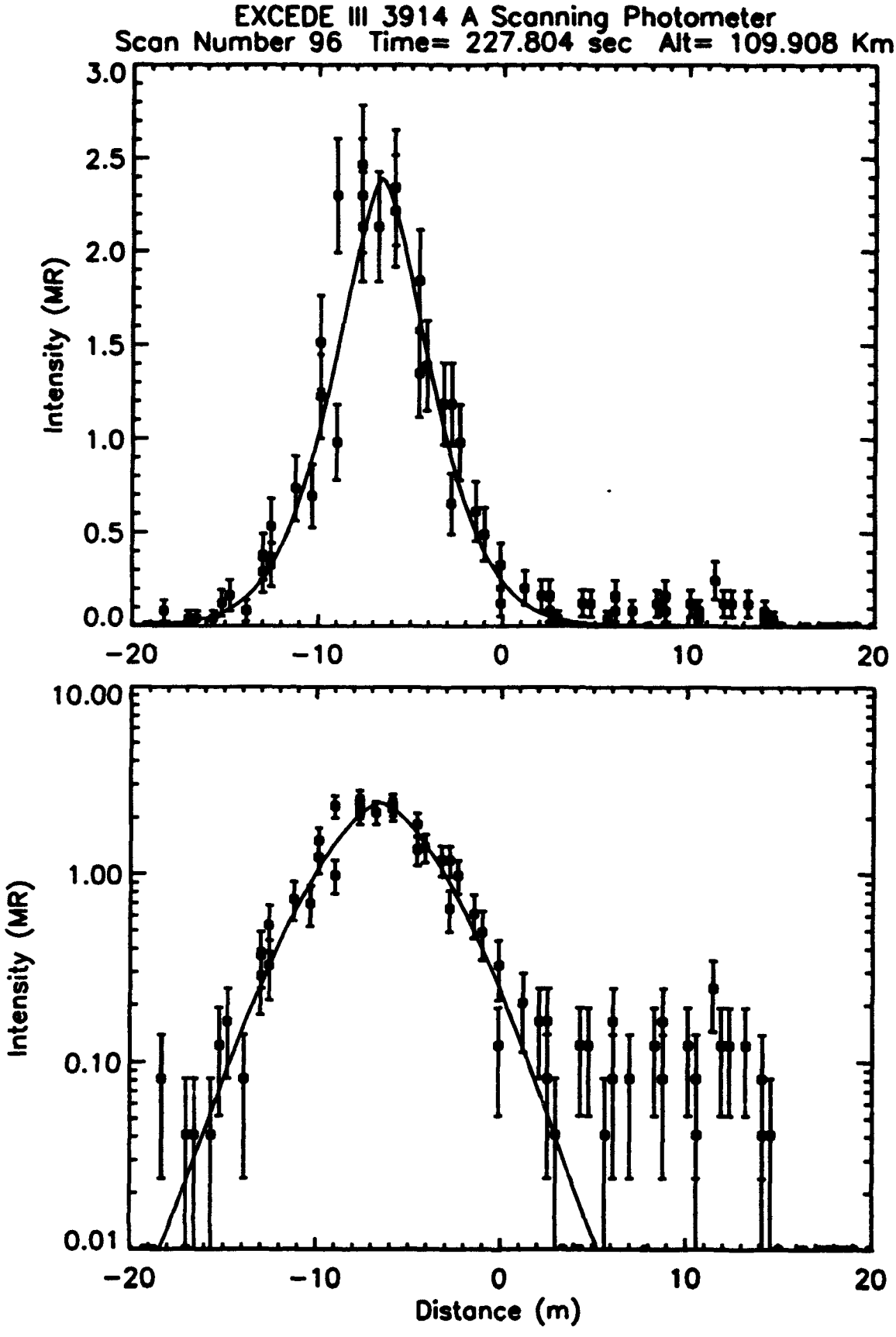

EXCEDE III 3914 A Scanning Photometer
Scan Number 91 Time= 222.605 sec Alt= 111.394 Km
Intensity (MR)
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

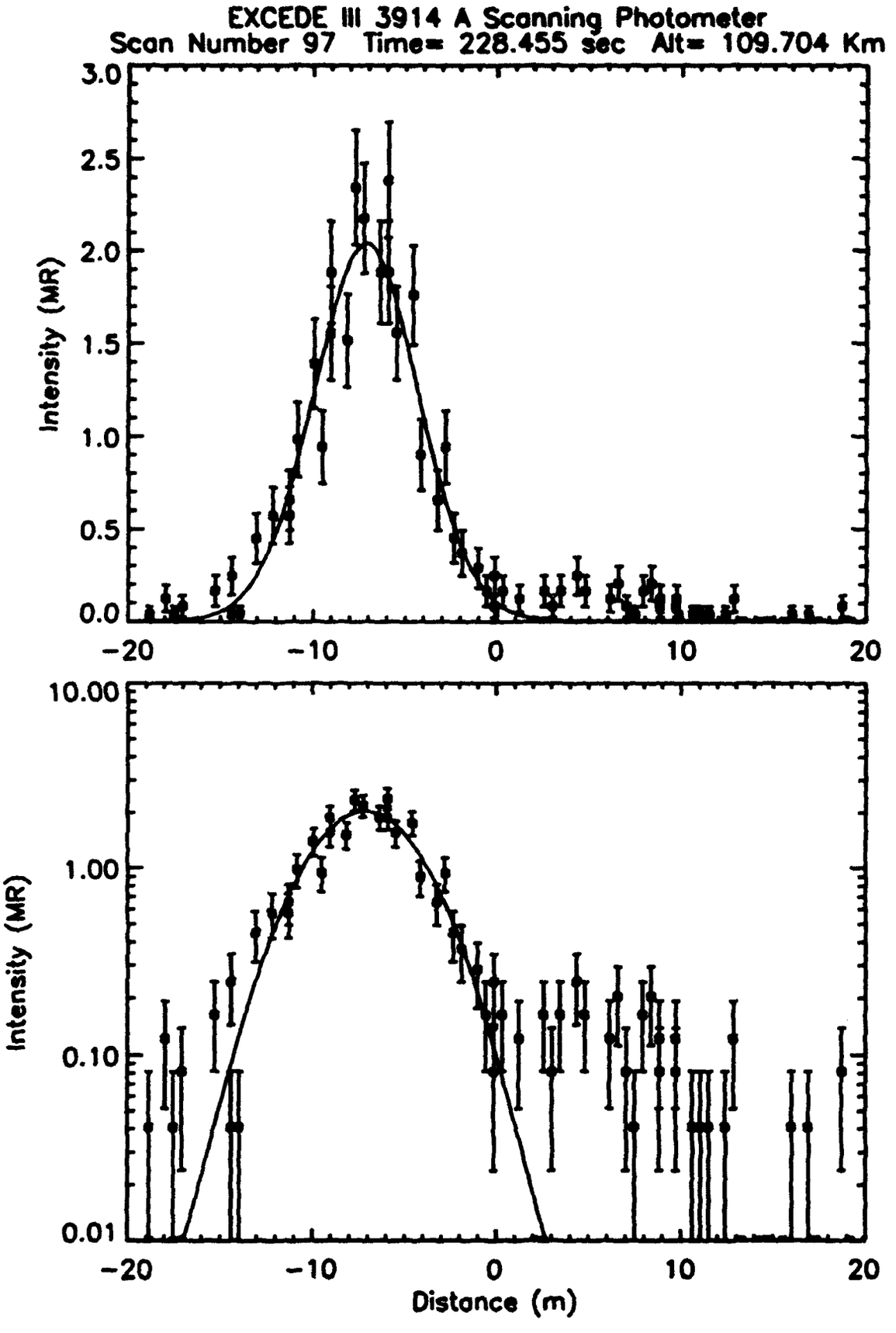

EXCEDE III 3914 A Scanning Photometer
Scan Number 92 Time= 223.897 sec Alt= 111.049 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

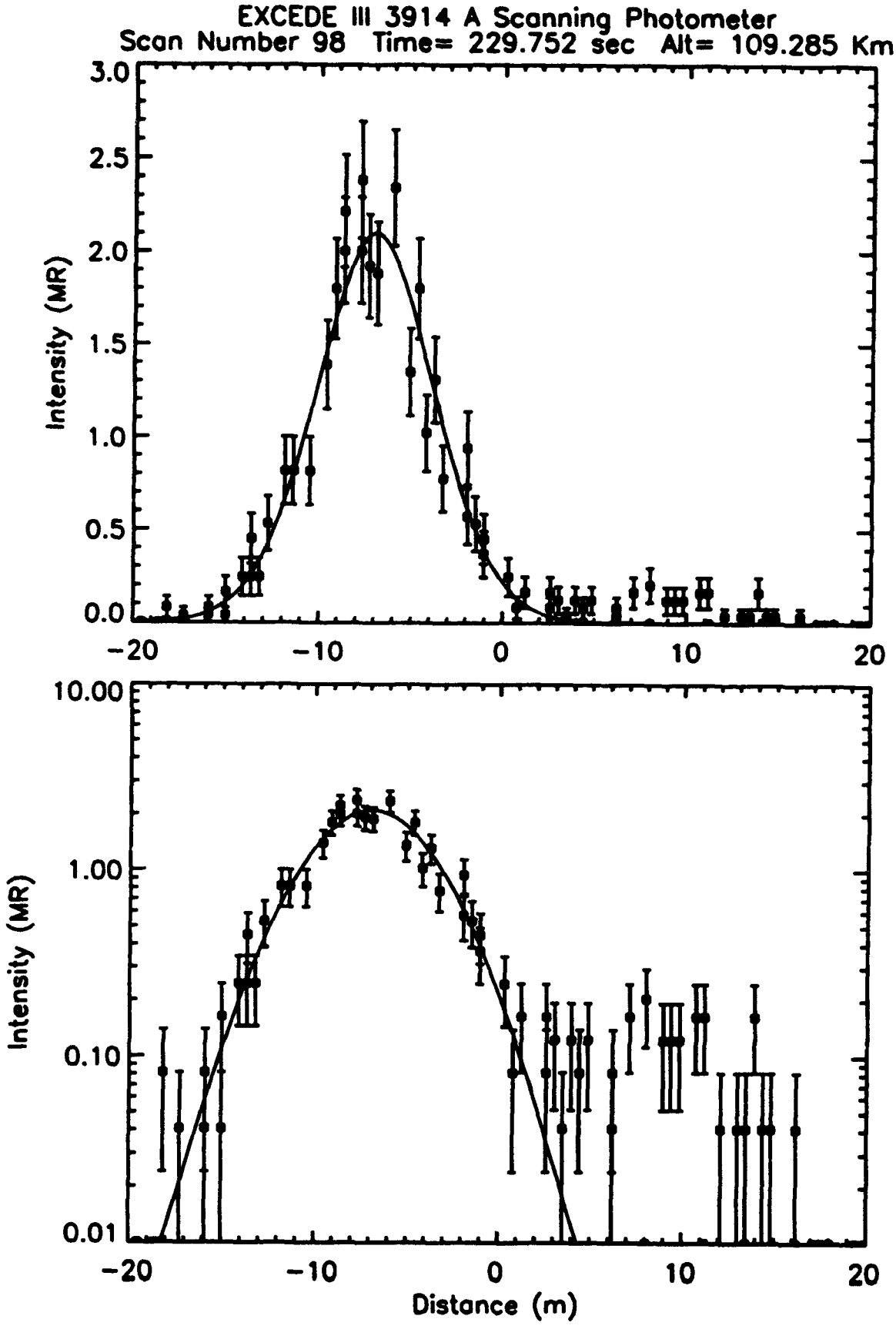

EXCEDE III 3914 A Scanning Photometer
Scan Number 93 Time= 224.550 sec Alt= 110.868 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-20
-10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
-20
-10
0
10
20
Distance (m)

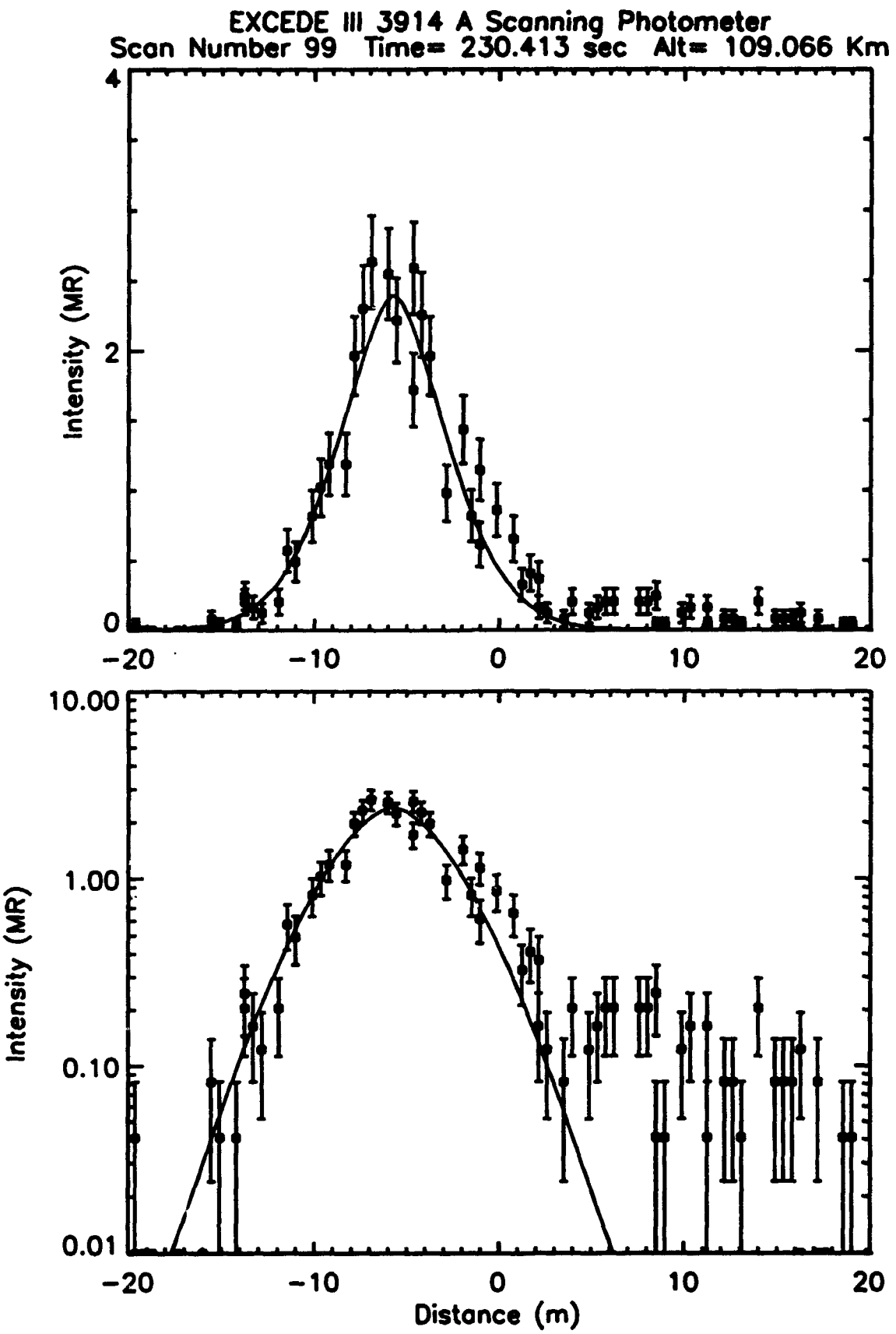

EXCEDE III 3914 A Scanning Photometer
Scan Number 94 Time= 225.701 sec Alt= 110.540 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

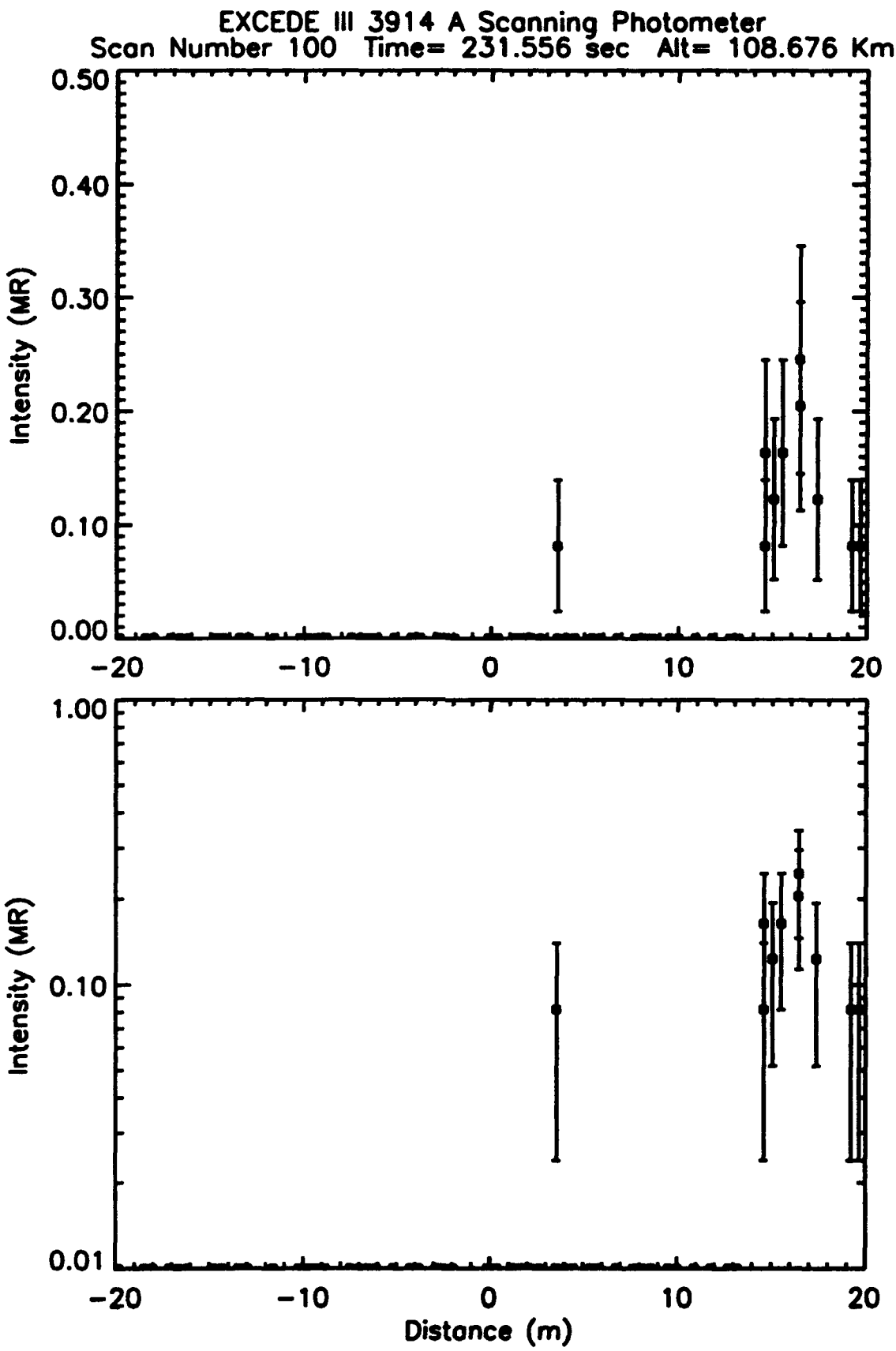

EXCEDE III 3914 A Scanning Photometer
Scan Number 95 Time= 226.660 sec Alt= 110.257 Km
Intensity (MR)
0.4
0.2
0.0
−20
−10
0
10
20
Intensity (MR)
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

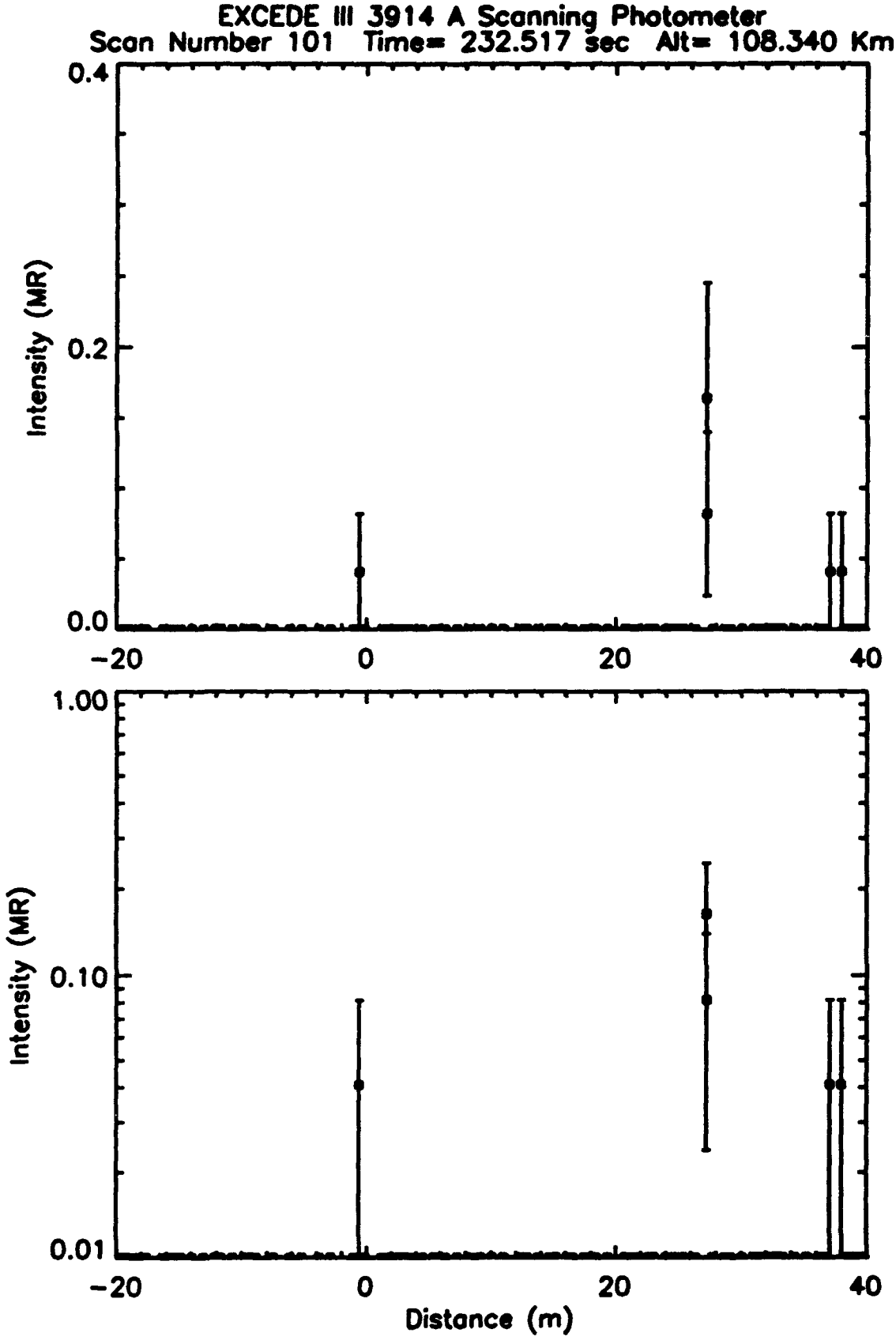

EXCEDE III 3914 A Scanning Photometer
Scan Number 96 Time= 227.804 sec Alt= 109.908 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
−20
−10
0
10
20
Distance (m)

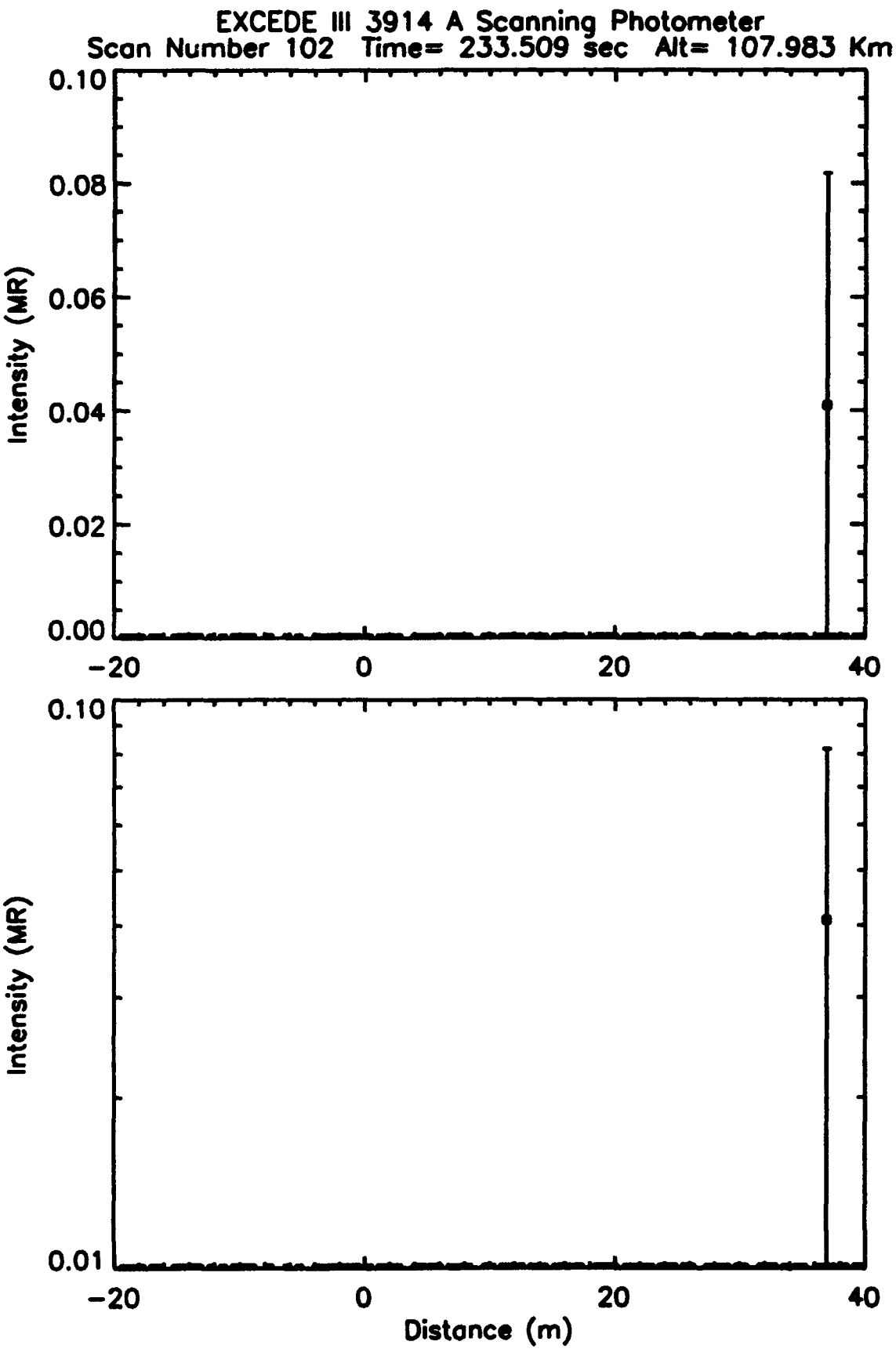

EXCEDE III 3914 A Scanning Photometer
Scan Number 97 Time= 228.455 sec Alt= 109.704 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
Distance (m)

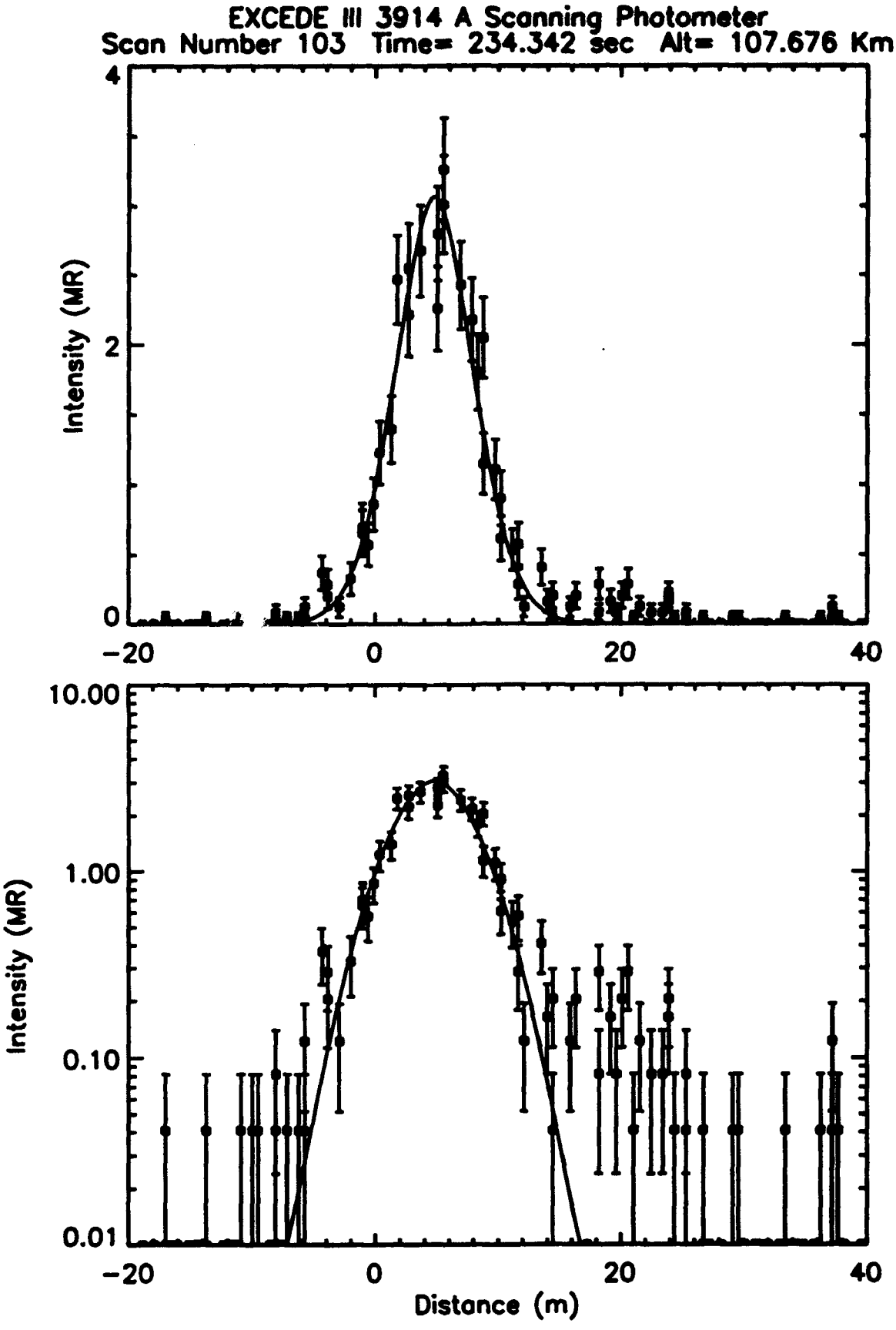

EXCEDE III 3914 A Scanning Photometer
Scan Number 98 Time= 229.752 sec Alt= 109.285 Km
Intensity (MR)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-20
-10
0
10
20
Intensity (MR)
10.00
1.00
0.10
0.01
-20
-10
0
10
20
Distance (m)

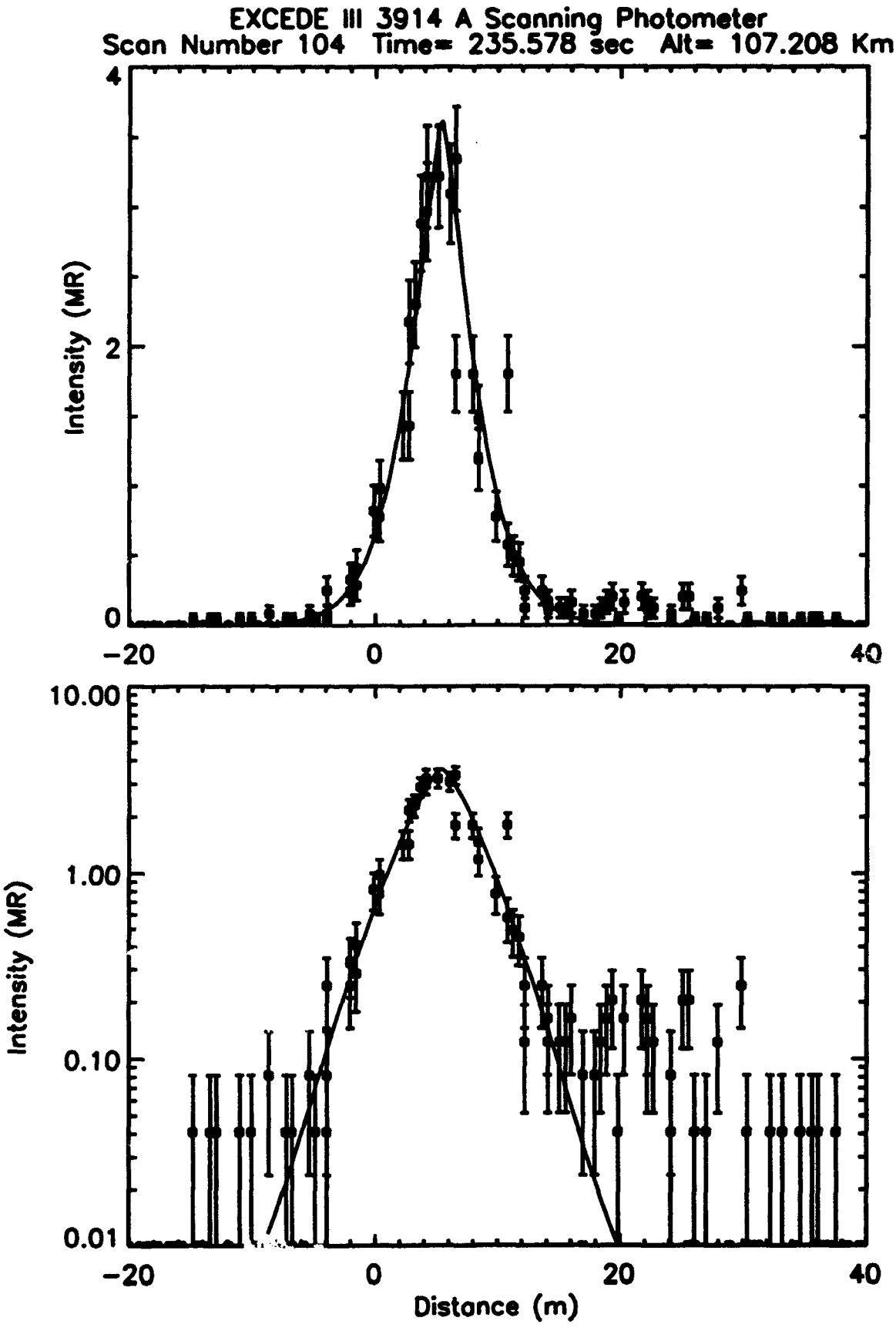

EXCEDE III 3914 A Scanning Photometer
Scan Number 99 Time= 230.413 sec Alt= 109.066 Km
Intensity (MR)
4
2
0
−20
−10
0
10
20
10.00
1.00
0.10
0.01
Intensity (MR)
−20
−10
0
10
20
Distance (m)

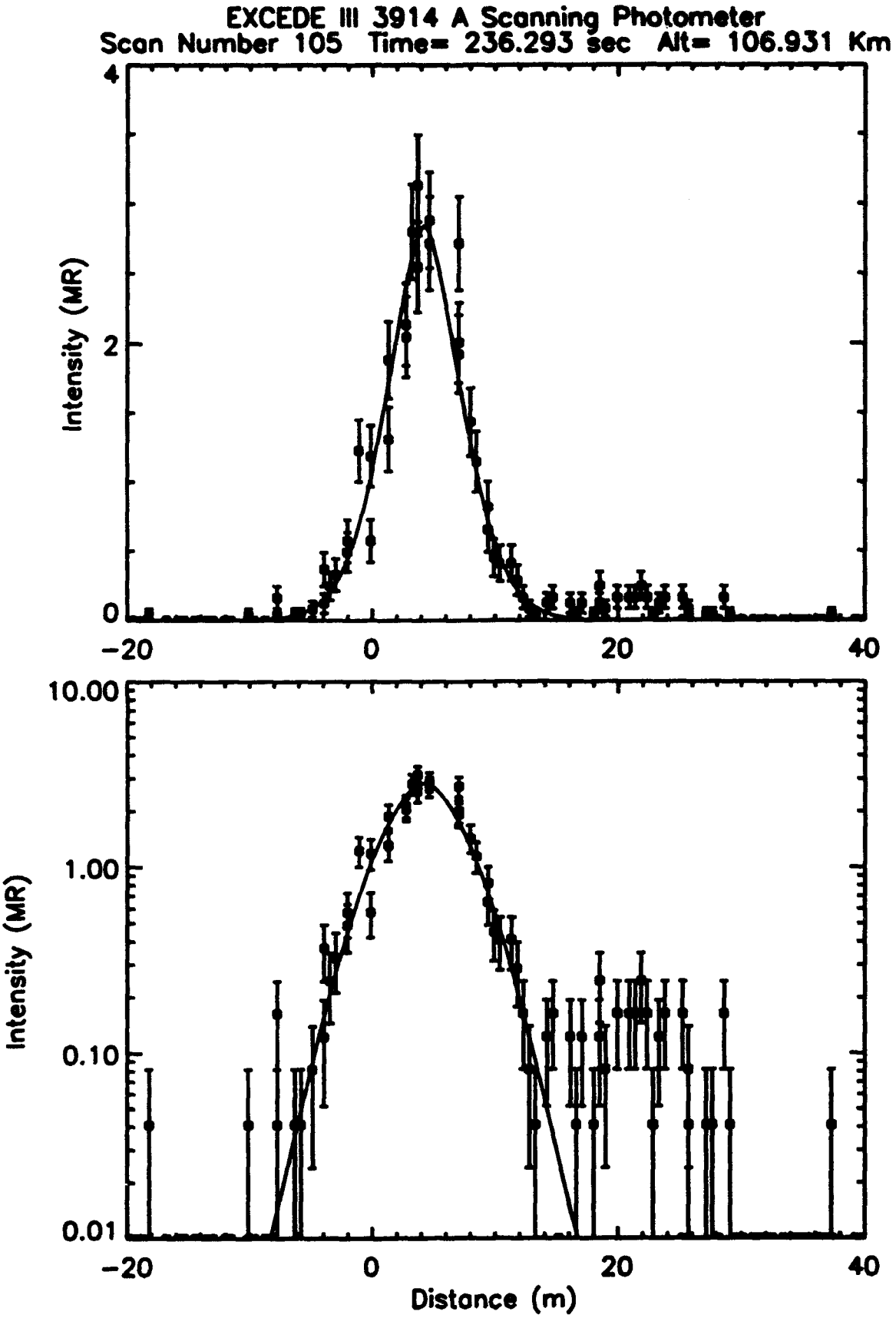

EXCEDE III 3914 A Scanning Photometer
Scan Number 100 Time= 231.556 sec Alt= 108.676 Km
0.50
0.40
0.30
0.20
0.10
0.00
Intensity (MR)
-20
-10
0
10
20
1.00
0.10
0.01
Intensity (MR)
-20
-10
0
10
20
Distance (m)

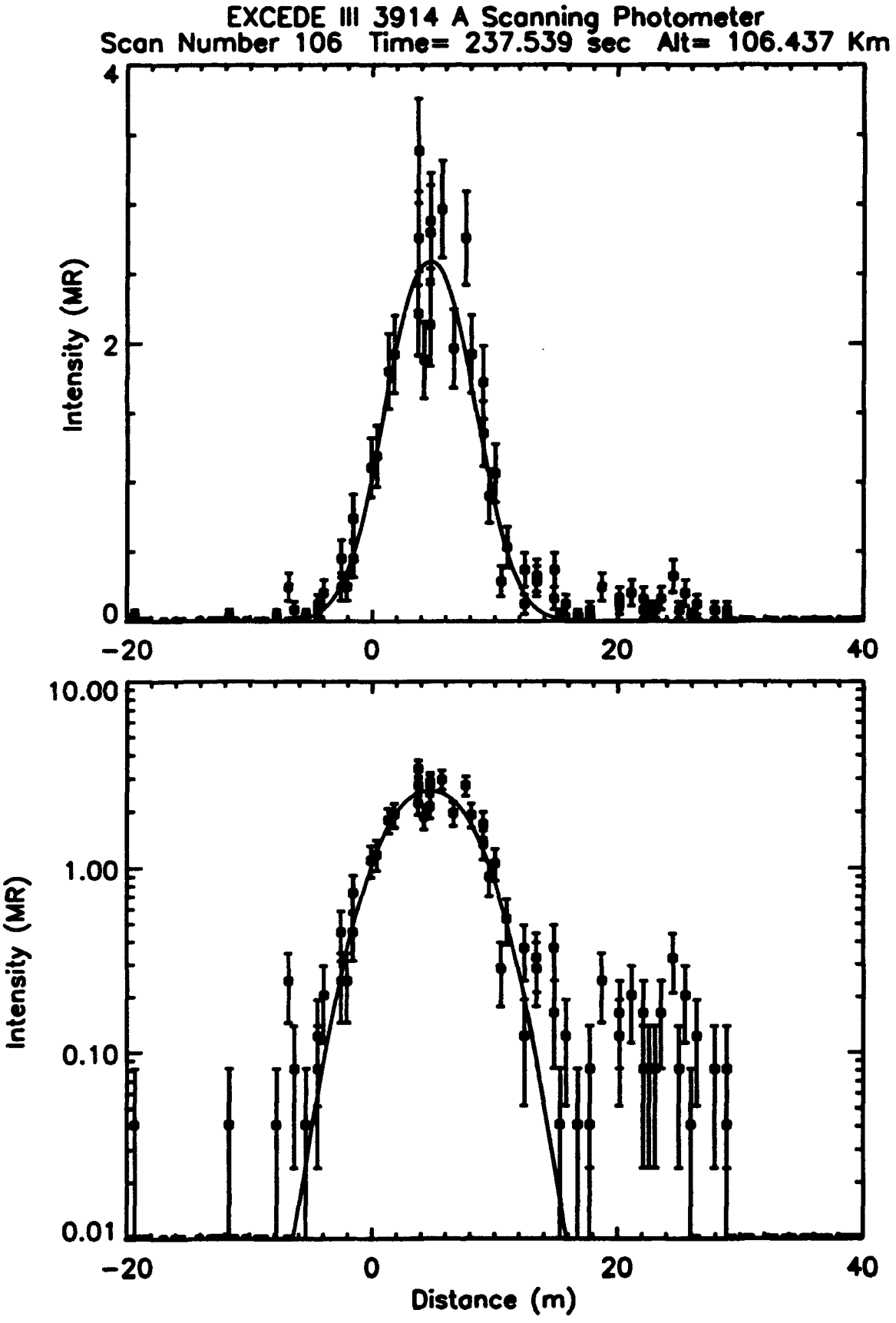

EXCEDE III 3914 A Scanning Photometer
Scan Number 101 Time= 232.517 sec Alt= 108.340 Km
Intensity (MR)
0.4
0.2
0.0
-20
0
20
40
Intensity (MR)
1.00
0.10
0.01
-20
0
20
40
Distance (m)

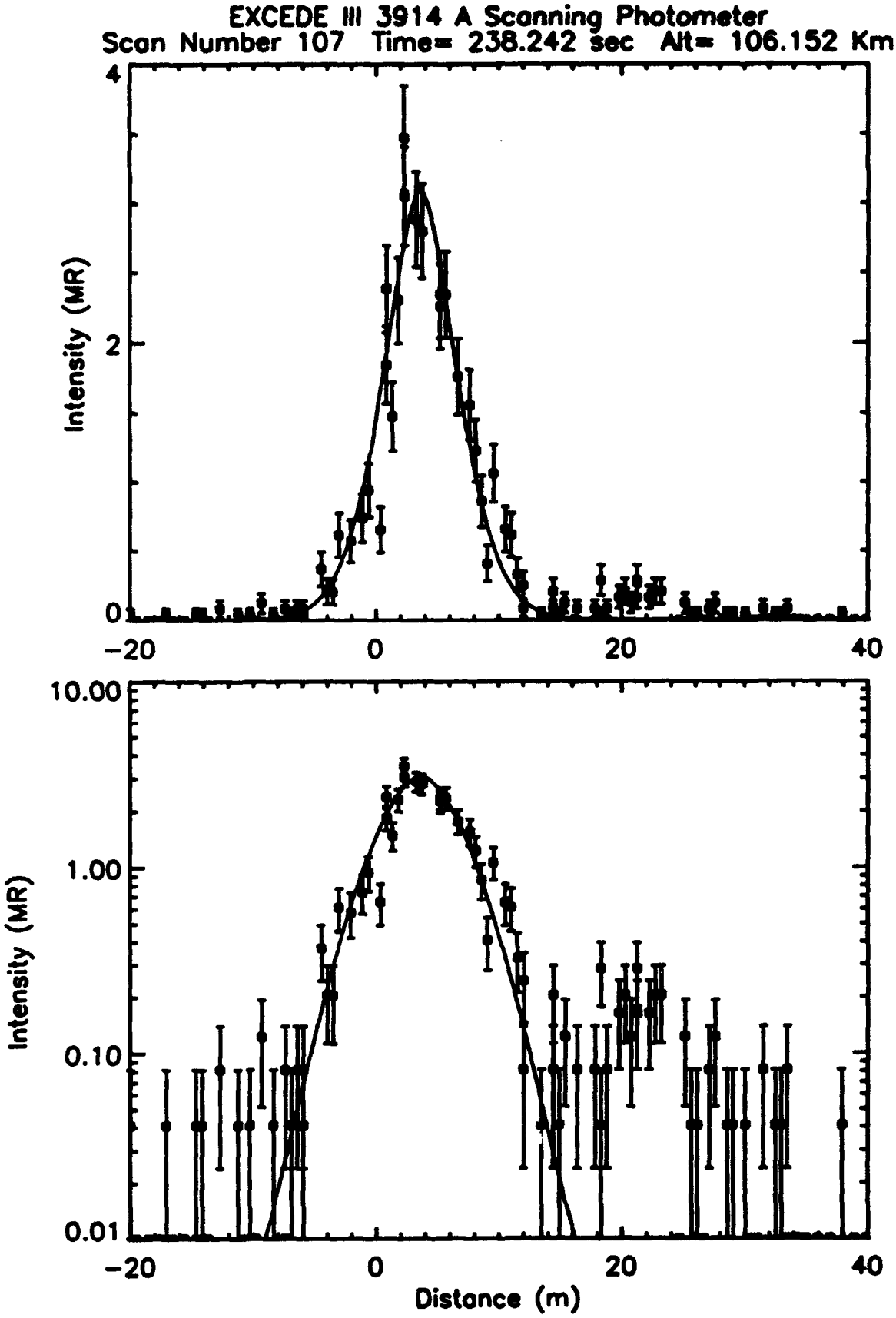

EXCEDE III 3914 A Scanning Photometer
Scan Number 102 Time= 233.509 sec Alt= 107.983 Km
Intensity (MR)
0.10
0.08
0.06
0.04
0.02
0.00
−20
0
20
40
Intensity (MR)
0.10
0.01
−20
0
20
40
Distance (m)

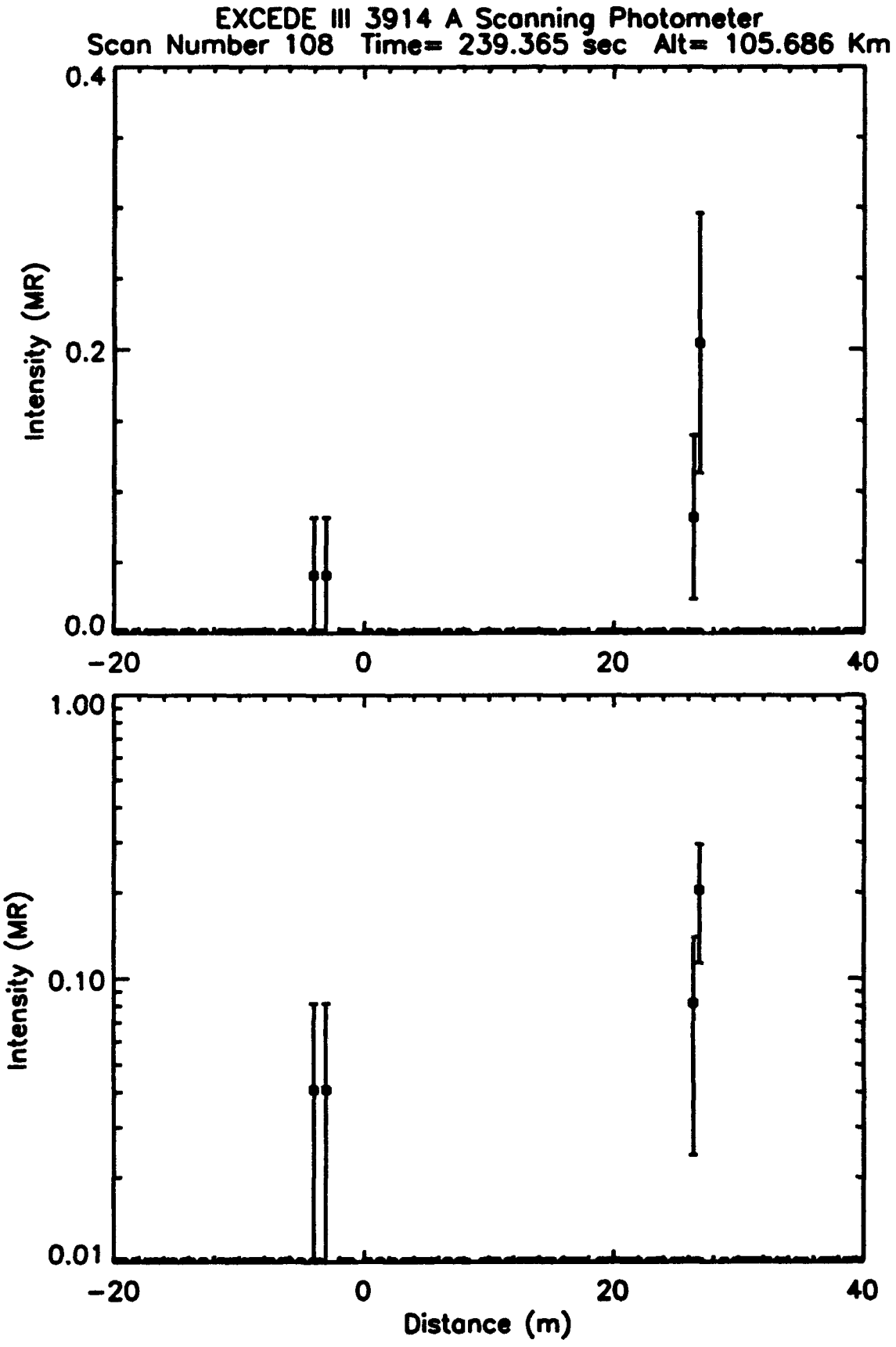

EXCEDE III 3914 A Scanning Photometer
Scan Number 103 Time= 234.342 sec Alt= 107.676 Km
Intensity (MR)
4
2
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

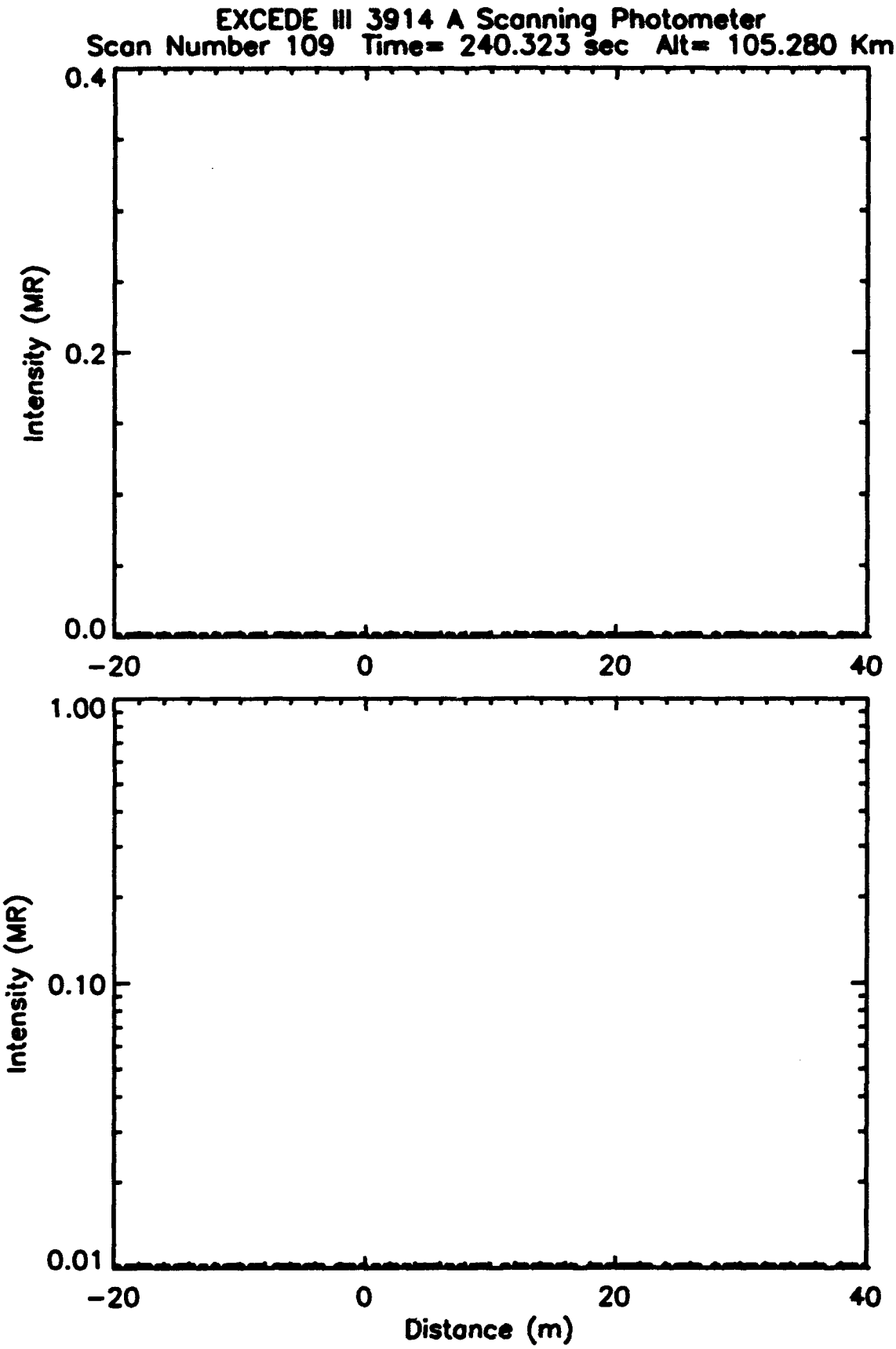

EXCEDE III 3914 A Scanning Photometer
Scan Number 104 Time= 235.578 sec Alt= 107.208 Km
Intensity (MR)
4
2
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

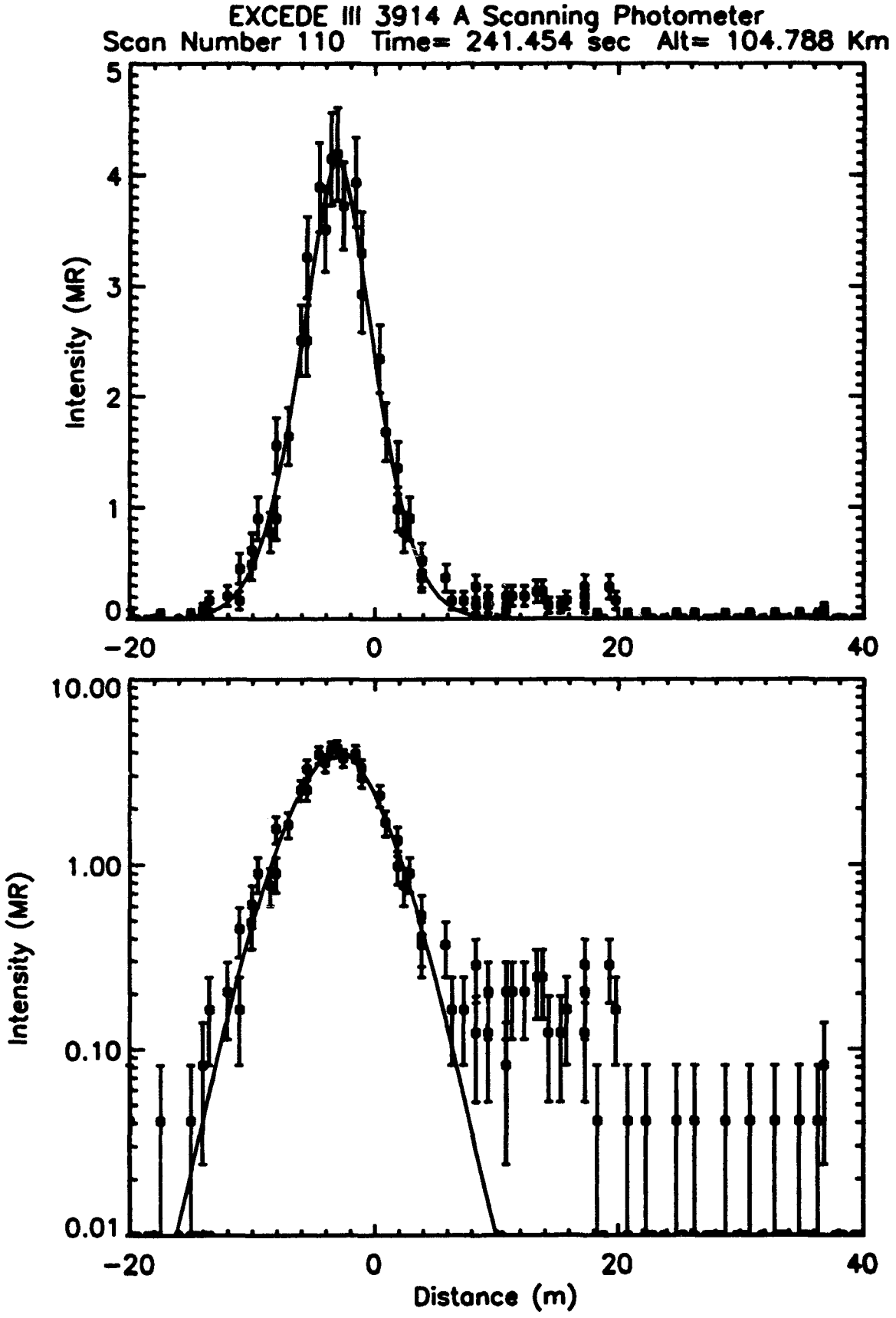

EXCEDE III 3914 A Scanning Photometer
Scan Number 105 Time= 236.293 sec Alt= 106.931 Km
Intensity (MR)
4
2
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

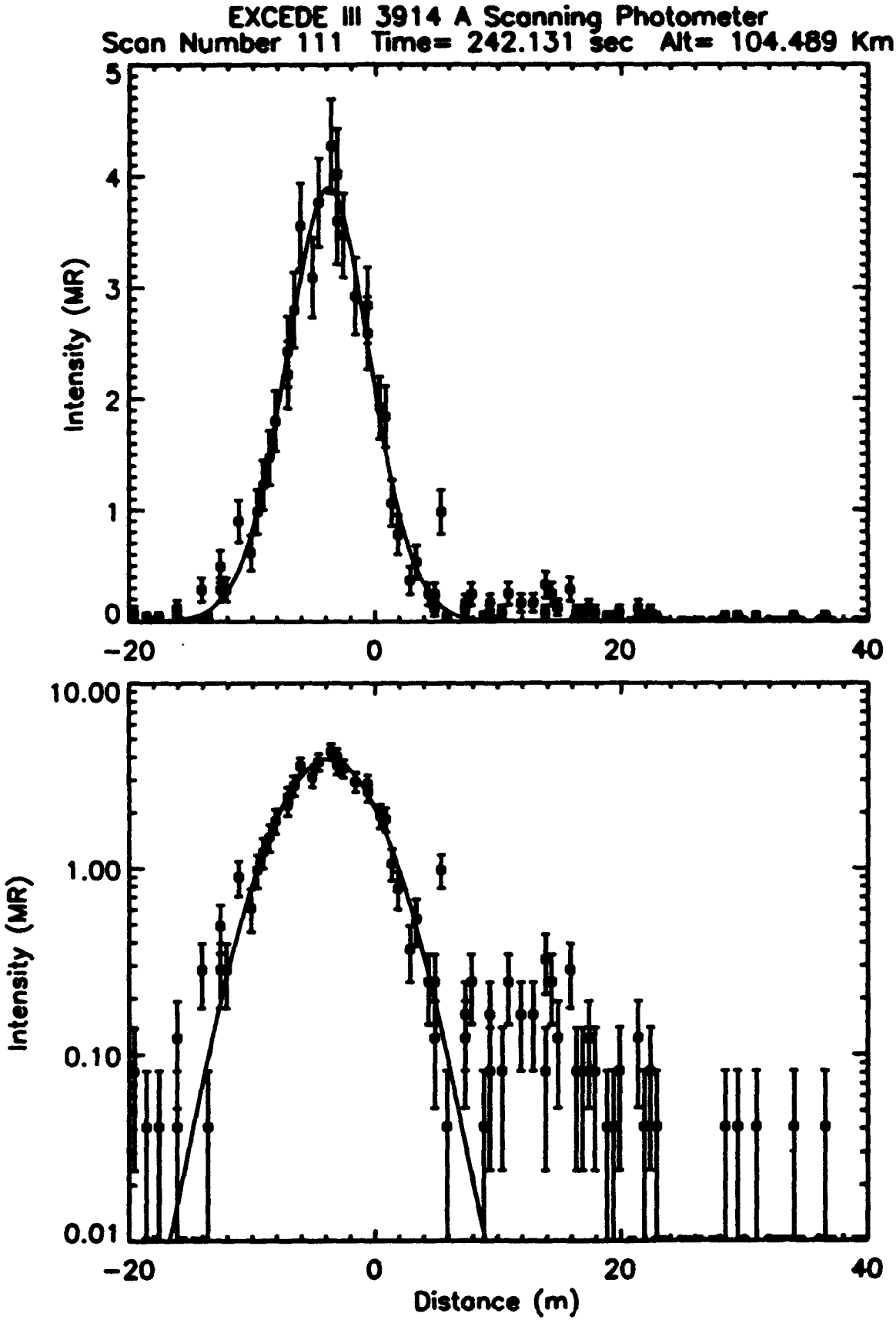

EXCEDE III 3914 A Scanning Photometer
Scan Number 106 Time= 237.539 sec Alt= 106.437 Km
Intensity (MR)
4
2
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

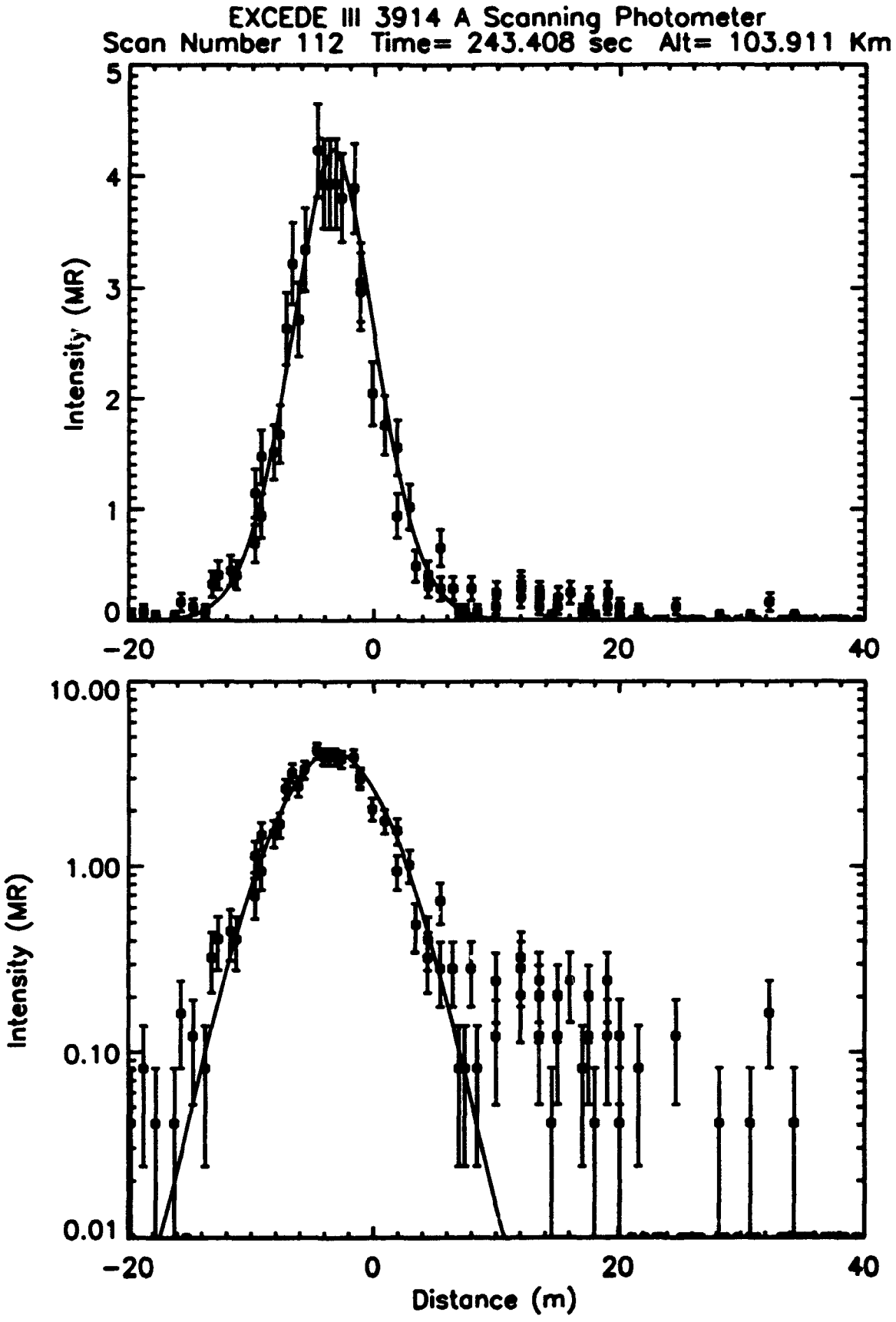

EXCEDE III 3914 A Scanning Photometer
Scan Number 107 Time= 238.242 sec Alt= 106.152 Km
Intensity (MR)
4
2
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

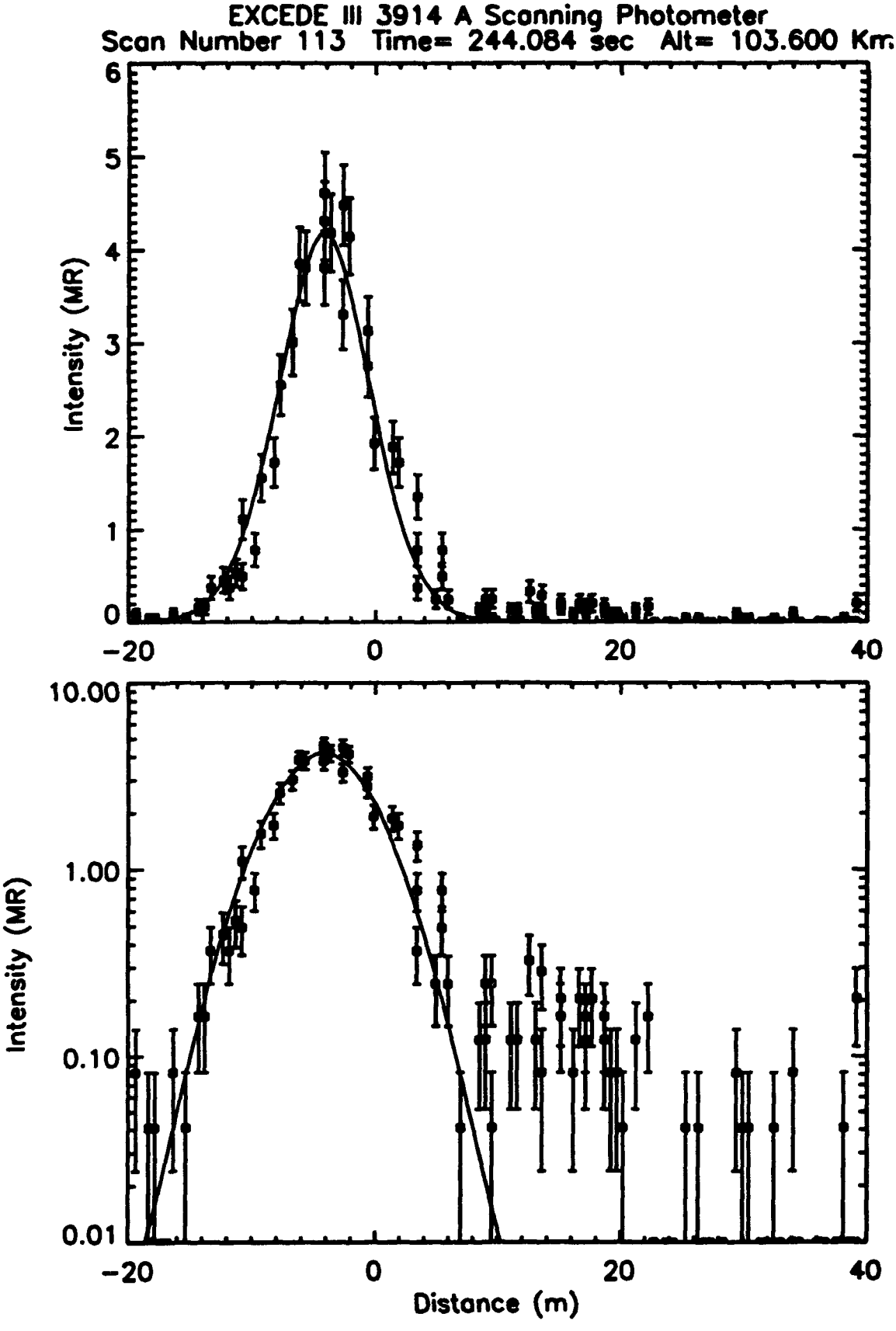

EXCEDE III 3914 A Scanning Photometer
Scan Number 108 Time= 239.365 sec Alt= 105.686 Km
Intensity (MR)
0.4
0.2
0.0
-20
0
20
40
Intensity (MR)
1.00
0.10
0.01
-20
0
20
40
Distance (m)

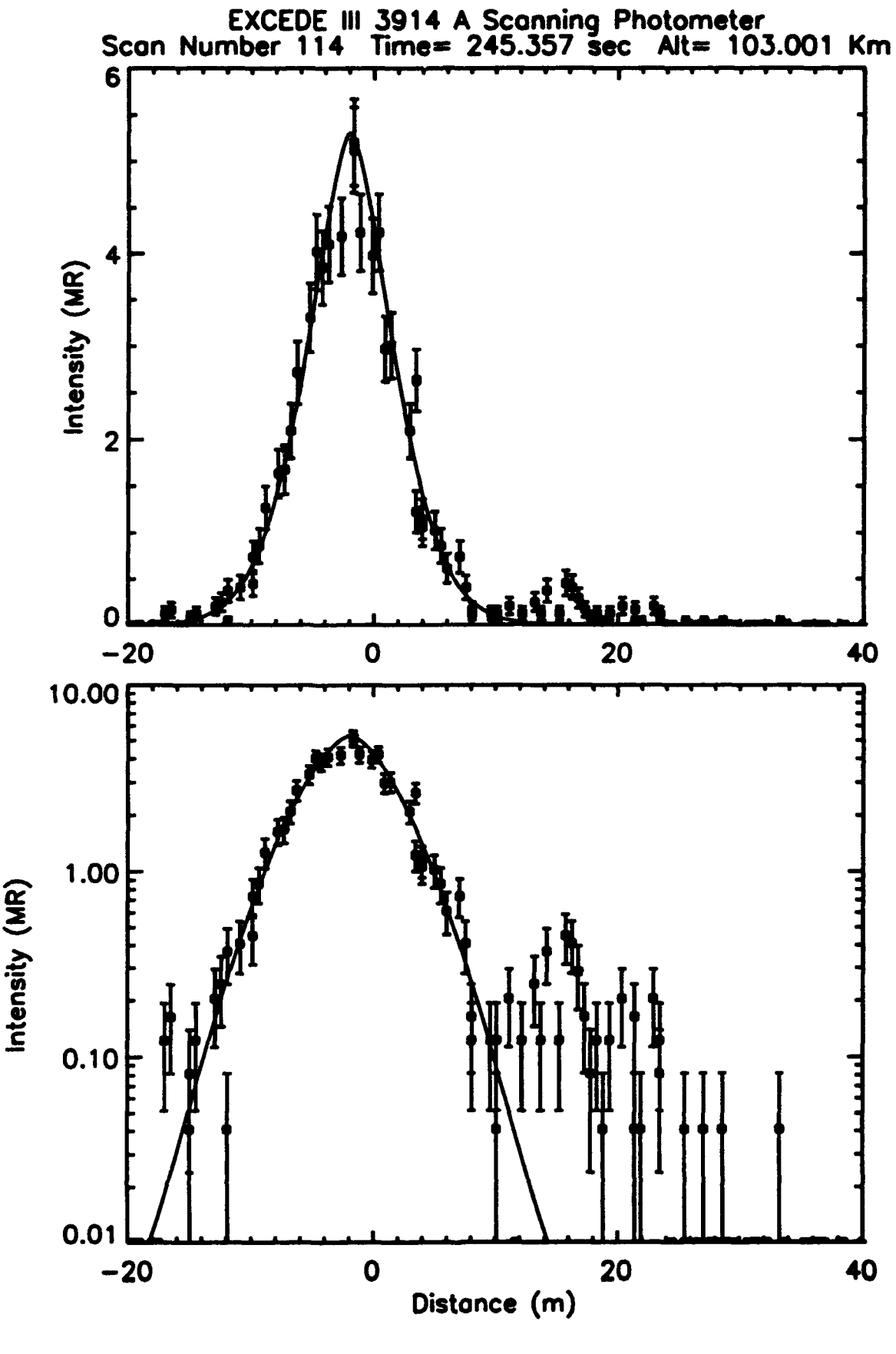

EXCEDE III 3914 A Scanning Photometer
Scan Number 109 Time= 240.323 sec Alt= 105.280 Km
Intensity (MR)
0.4
0.2
0.0
−20
0
20
40
Intensity (MR)
1.00
0.10
0.01
−20
0
20
40
Distance (m)

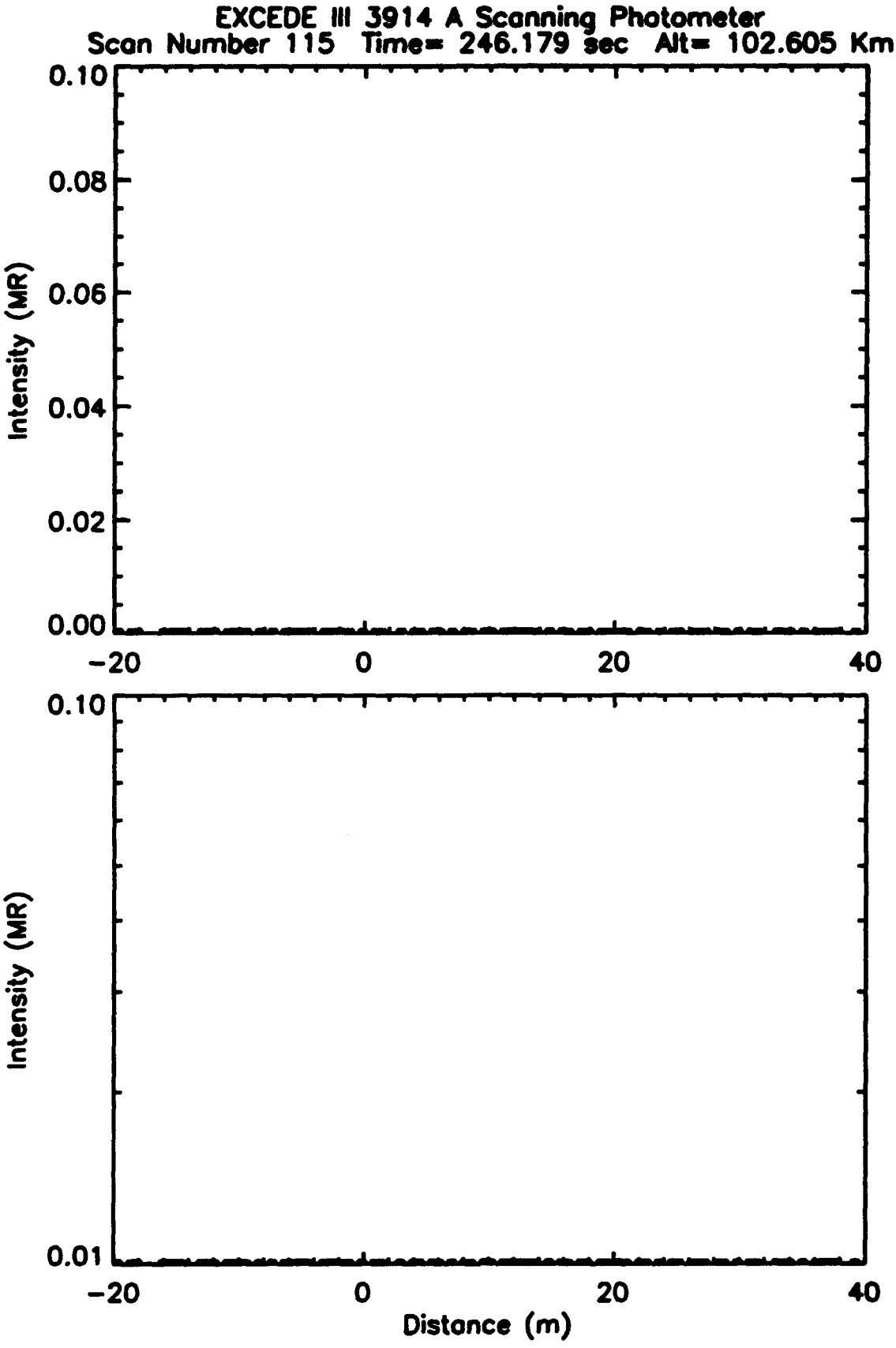

EXCEDE III 3914 A Scanning Photometer
Scan Number 110 Time= 241.454 sec Alt= 104.788 Km
Intensity (MR)
5
4
3
2
1
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

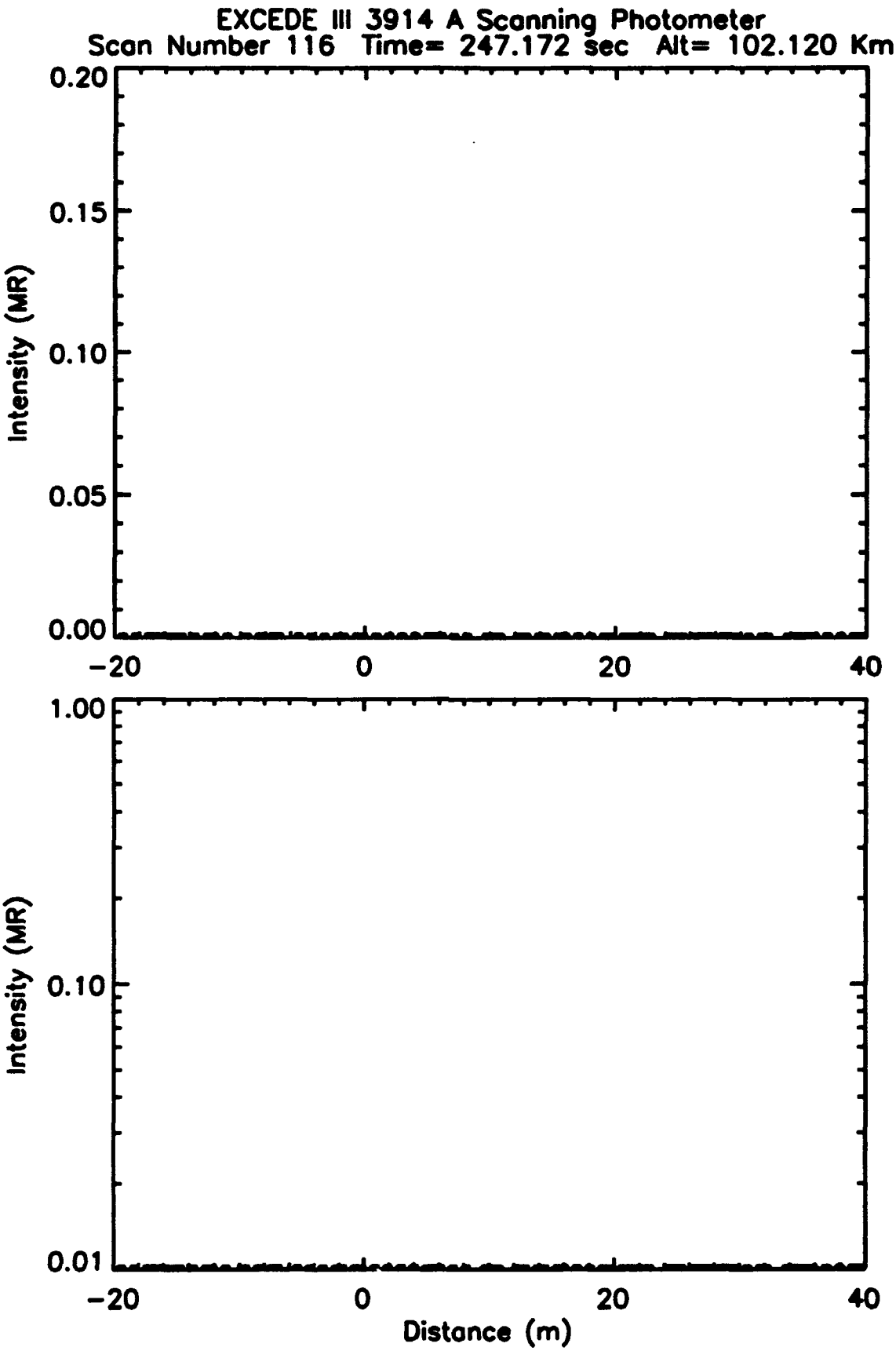

EXCEDE III 3914 A Scanning Photometer
Scan Number 111 Time= 242.131 sec Alt= 104.489 Km
Intensity (MR)
5
4
3
2
1
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

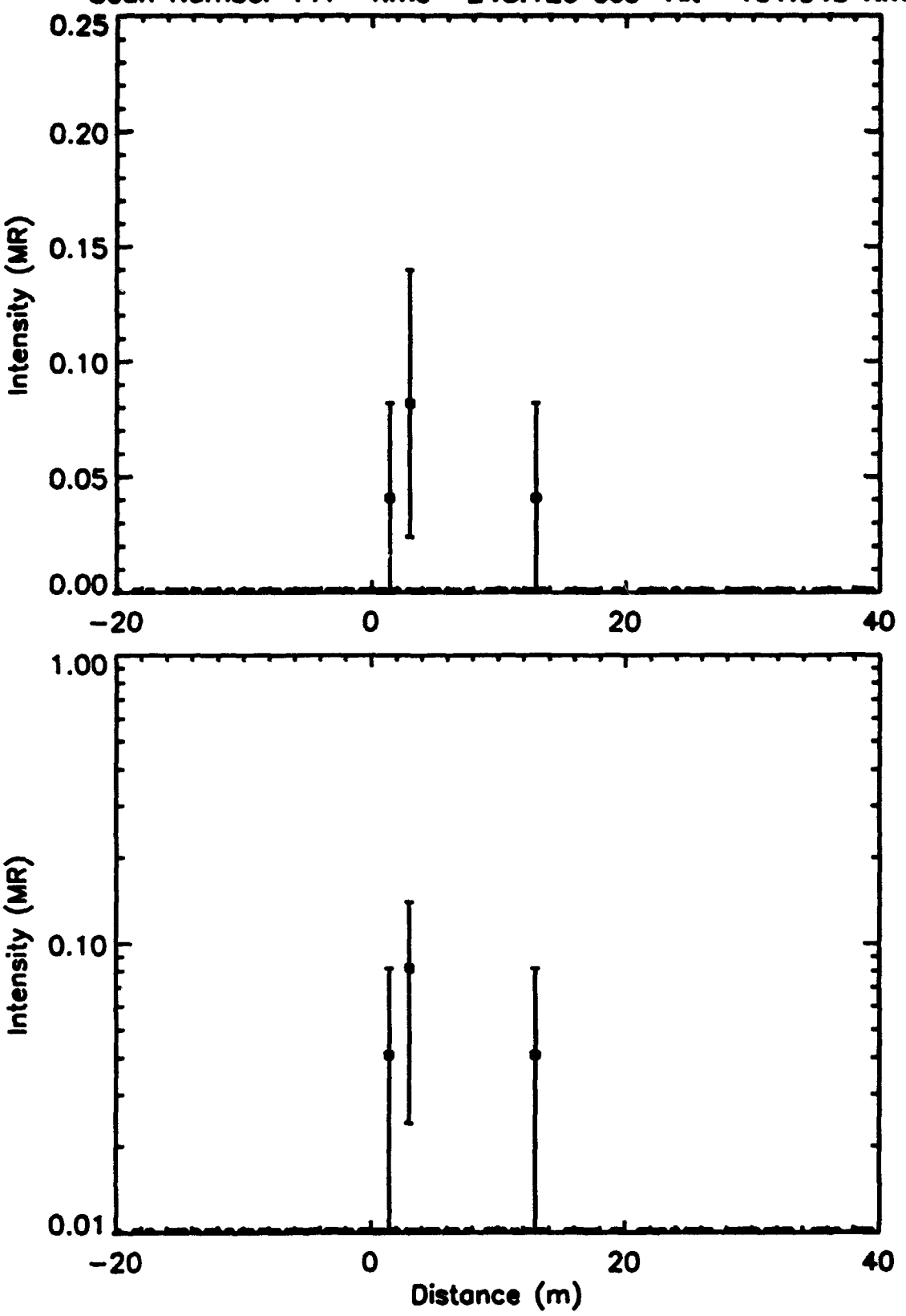

EXCEDE III 3914 A Scanning Photometer
Scan Number 112 Time= 243.408 sec Alt= 103.911 Km
Intensity (MR)
5
4
3
2
1
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

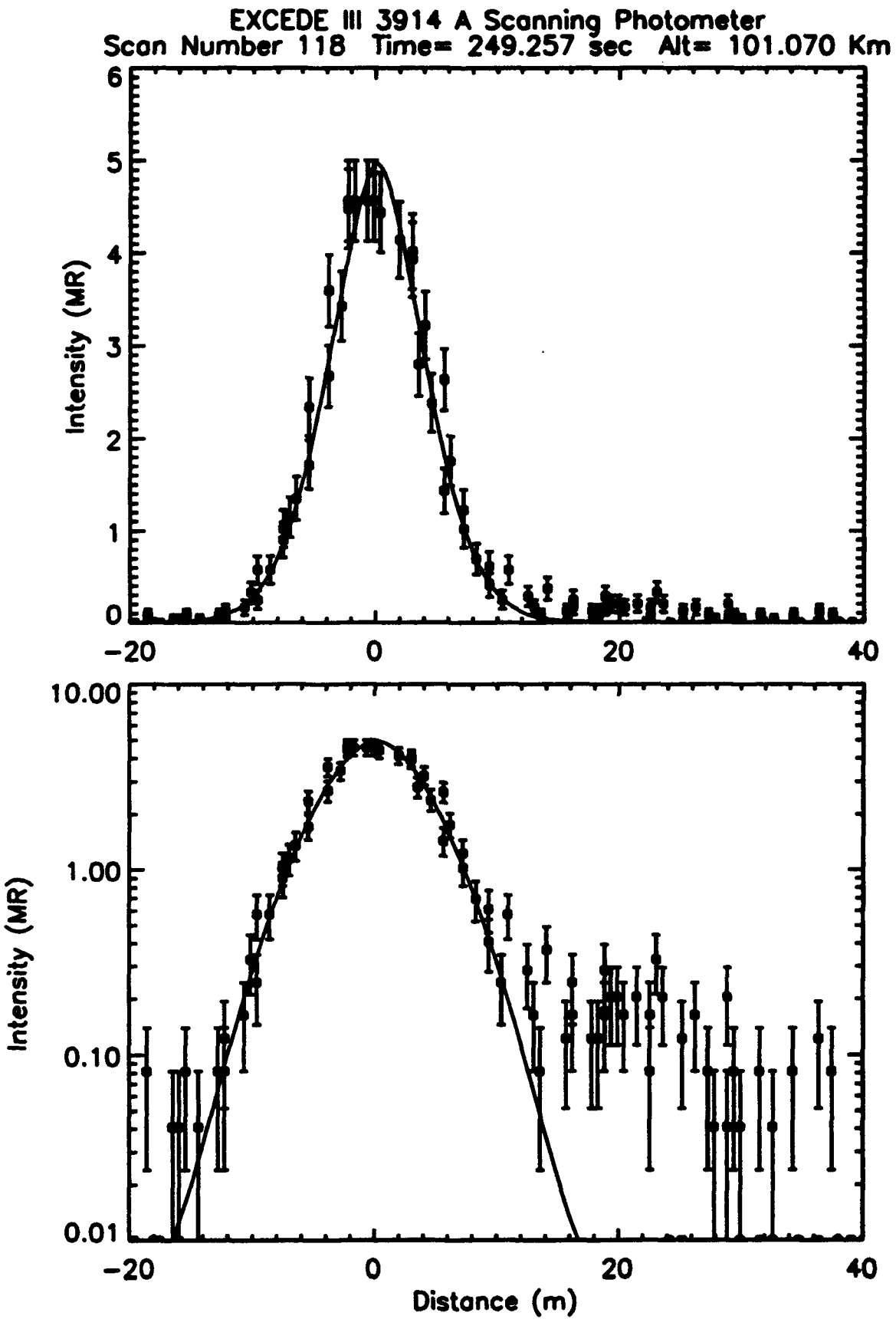

EXCEDE III 3914 A Scanning Photometer
Scan Number 113 Time= 244.084 sec Alt= 103.600 Km
Intensity (MR)
6
5
4
3
2
1
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

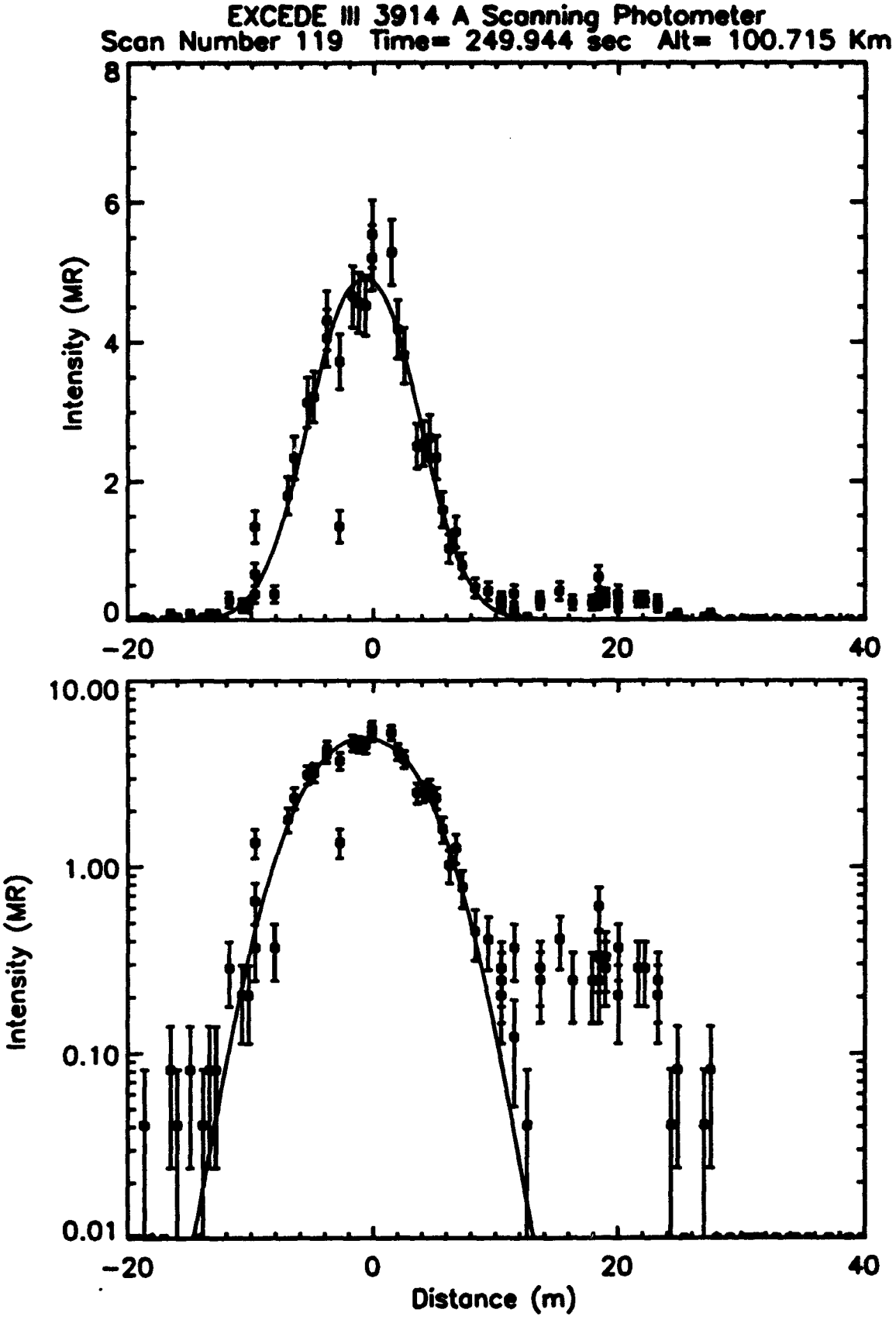

EXCEDE III 3914 A Scanning Photometer
Scan Number 114 Time= 245.357 sec Alt= 103.001 Km
Intensity (MR)
6
4
2
0
-20
0
20
40
Intensity (MR)
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

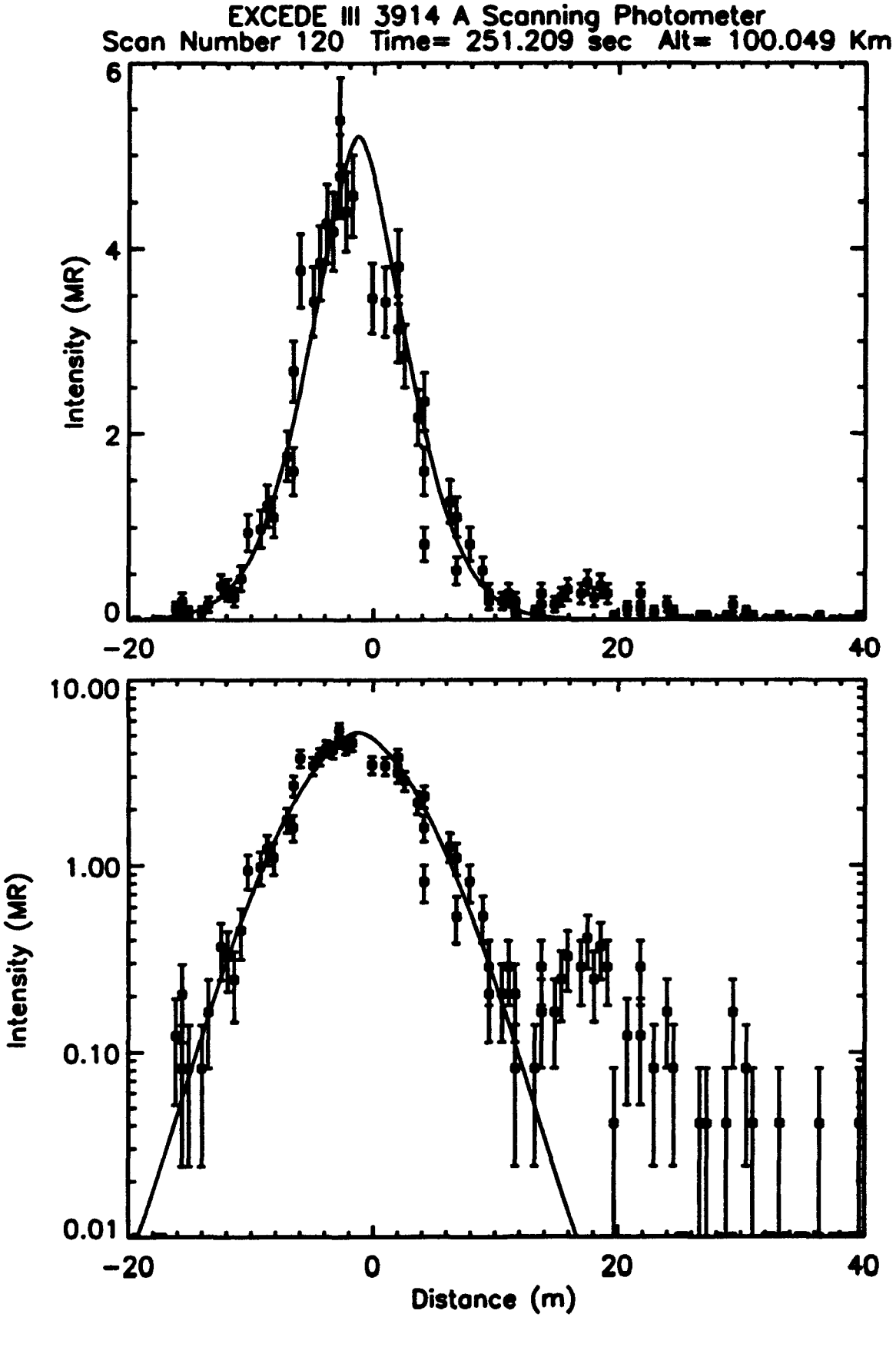

EXCEDE III 3914 A Scanning Photometer
Scan Number 115 Time= 246.179 sec Alt= 102.605 Km
0.10
0.08
0.06
0.04
0.02
0.00
Intensity (MR)
−20
0
20
40
0.10
0.01
Intensity (MR)
−20
0
20
40
Distance (m)

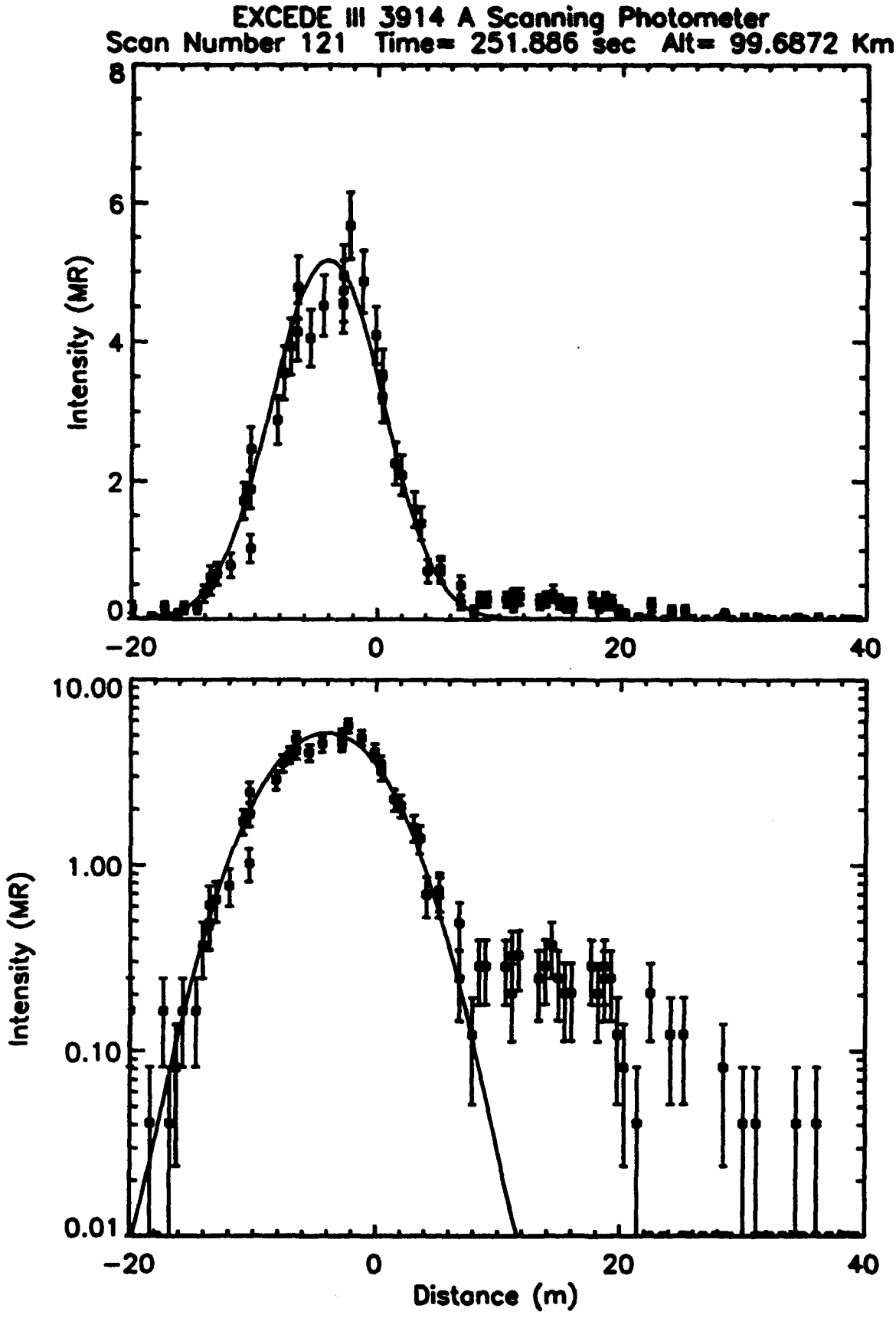

EXCEDE III 3914 A Scanning Photometer
Scan Number 116 Time= 247.172 sec Alt= 102.120 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
0
20
40
Intensity (MR)
1.00
0.10
0.01
−20
0
20
40
Distance (m)

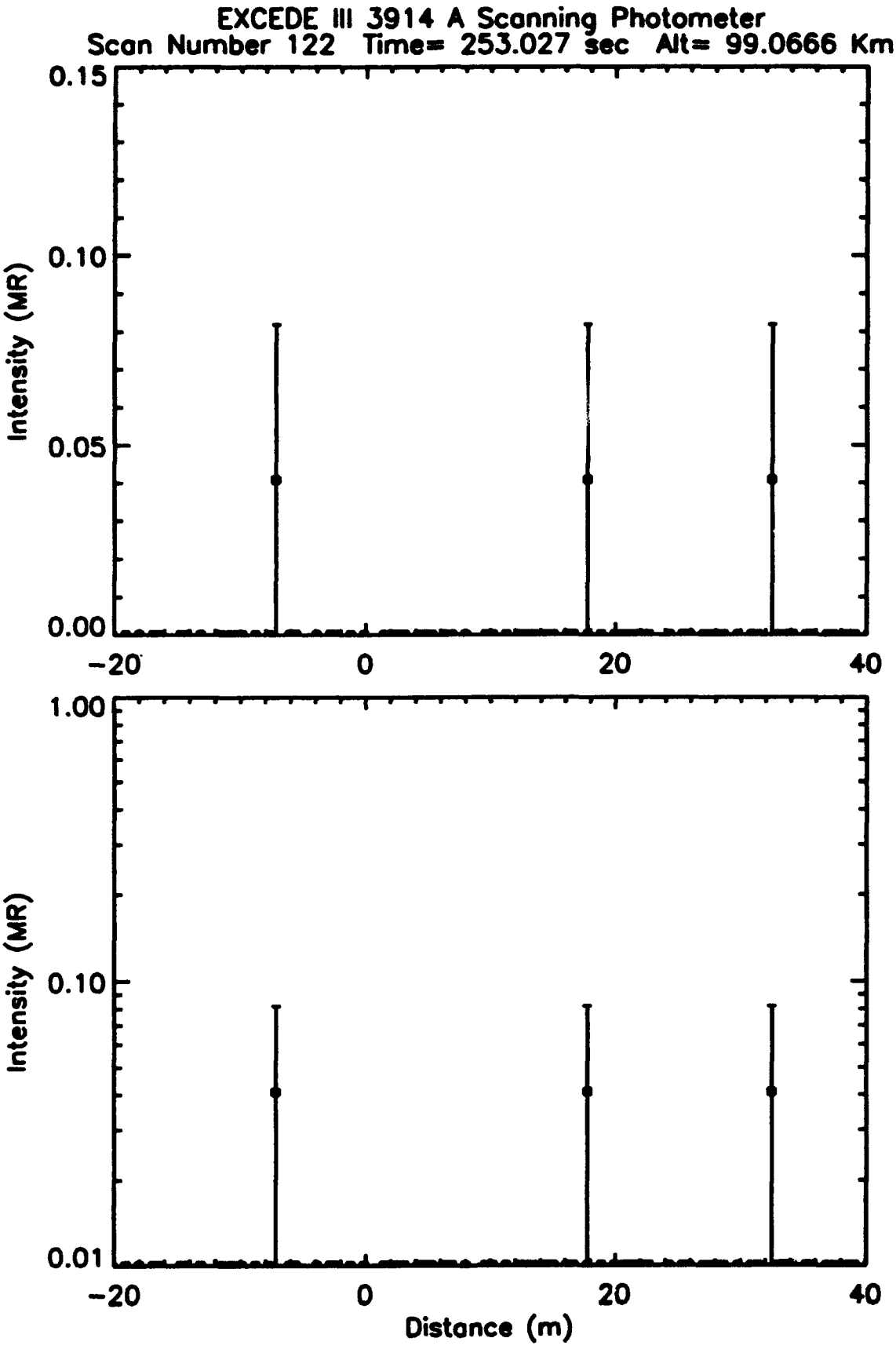

EXCEDE III 3914 A Scanning Photometer
Scan Number 117 Time= 248.129 sec Alt= 101.643 Km
Intensity (MR)
0.25
0.20
0.15
0.10
0.05
0.00
−20
0
20
40
Intensity (MR)
1.00
0.10
0.01
−20
0
20
40
Distance (m)

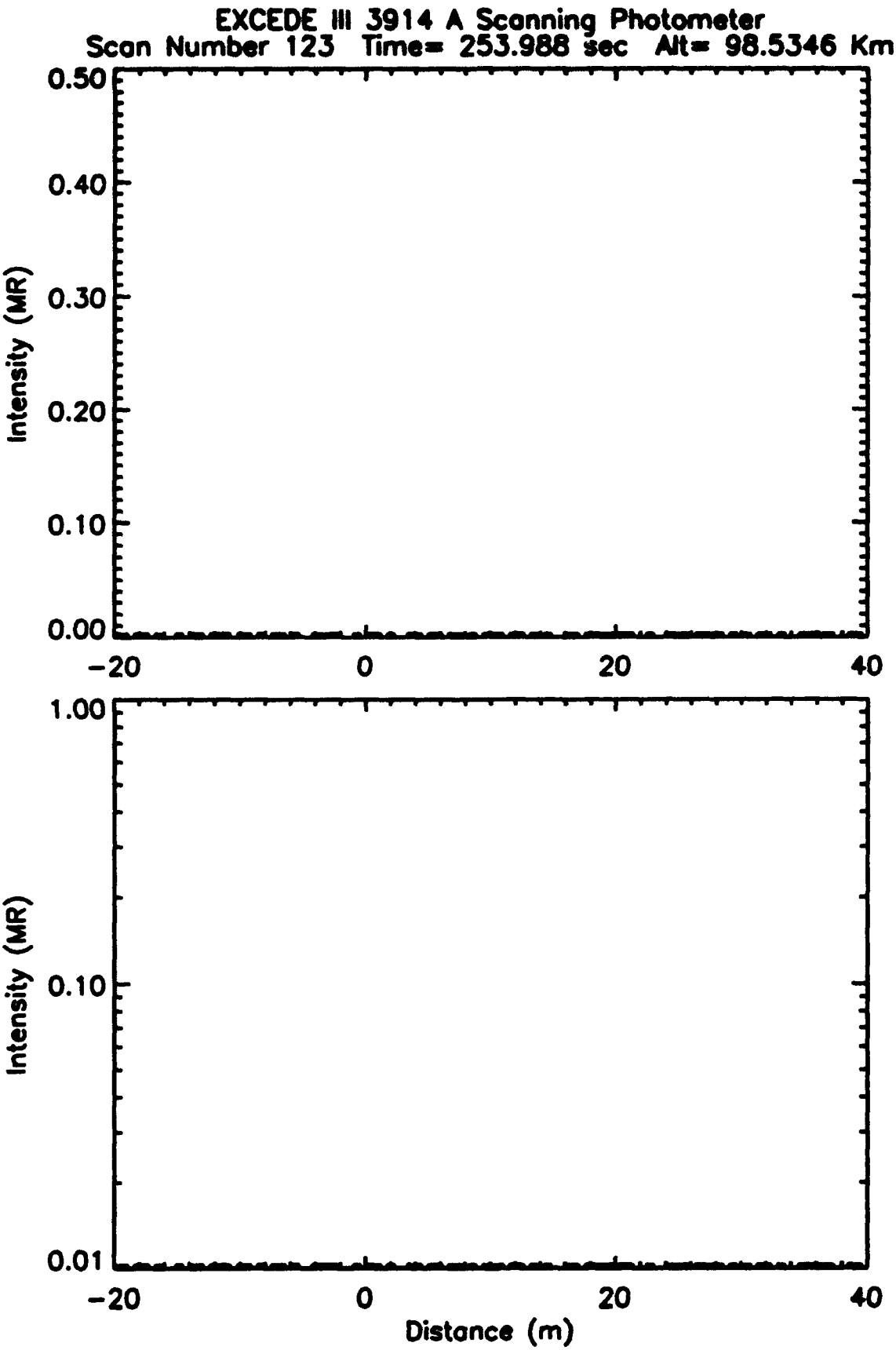

EXCEDE III 3914 A Scanning Photometer
Scan Number 118 Time= 249.257 sec Alt= 101.070 Km
Intensity (MR)
6
5
4
3
2
1
0
-20
0
20
40
Intensity (MR)
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

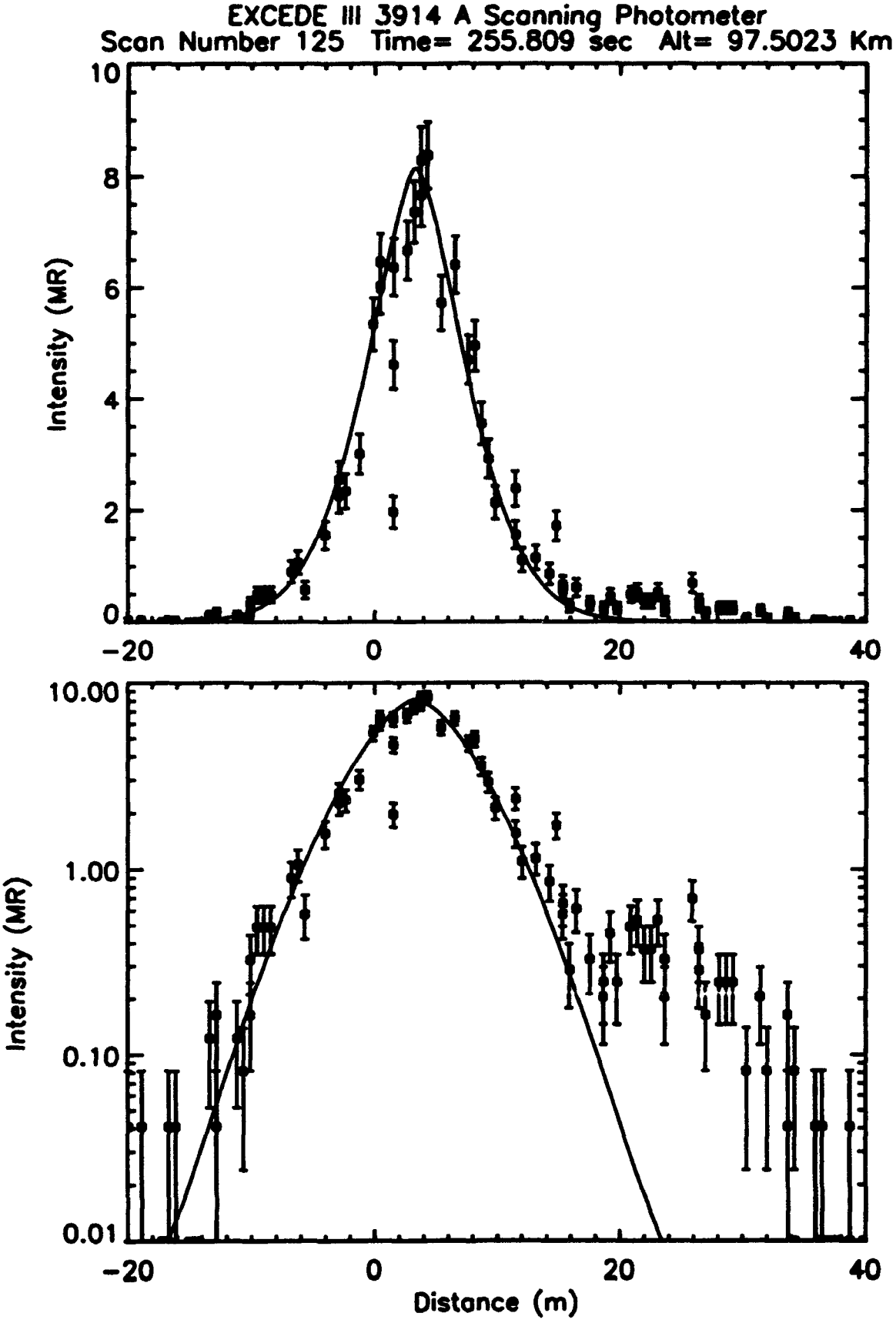

EXCEDE III 3914 A Scanning Photometer
Scan Number 119 Time= 249.944 sec Alt= 100.715 Km
Intensity (MR)
8
6
4
2
0
-20
0
20
40
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

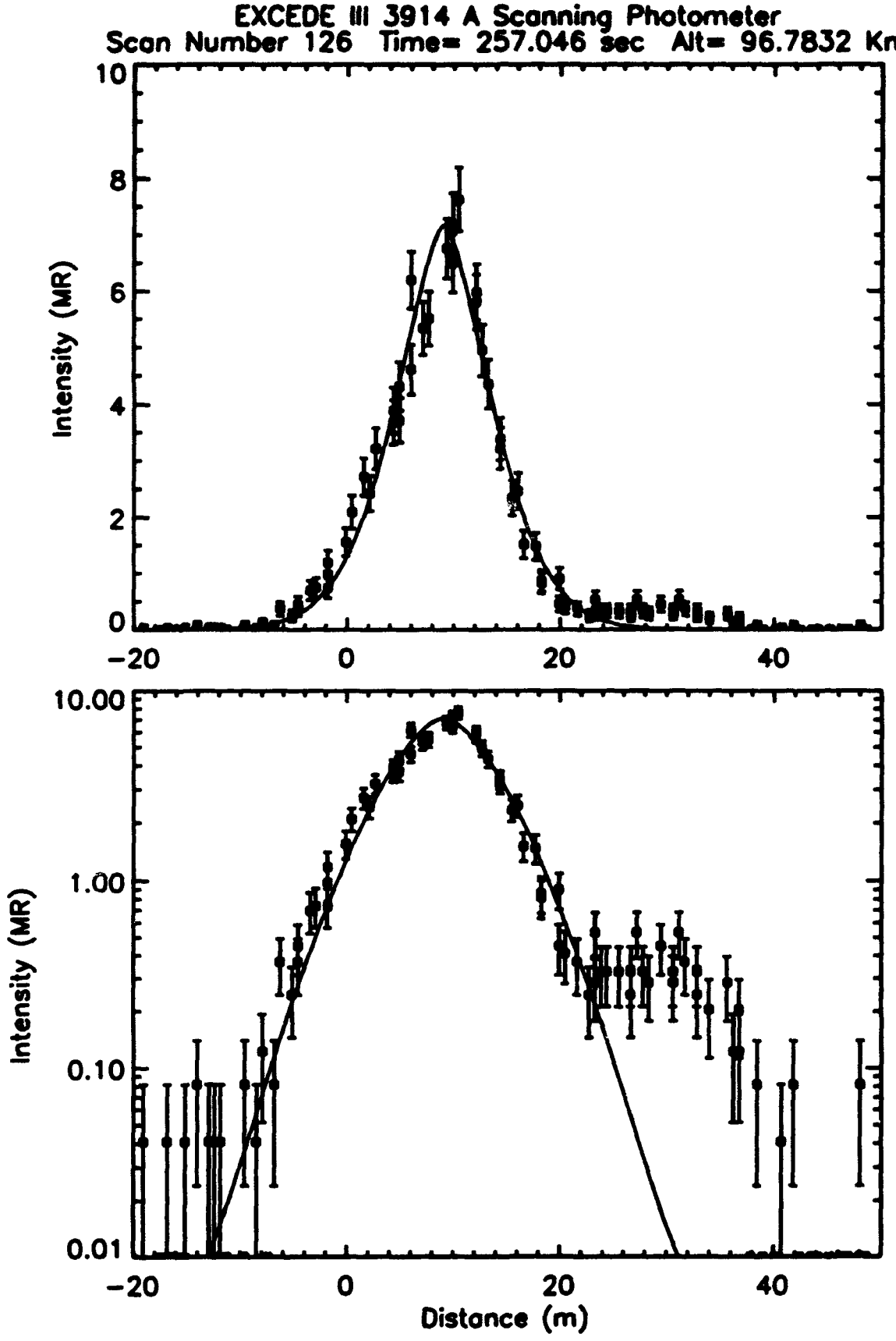

EXCEDE III 3914 A Scanning Photometer
Scan Number 120 Time= 251.209 sec Alt= 100.049 Km
Intensity (MR)
6
4
2
0
-20
0
20
40
Intensity (MR)
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

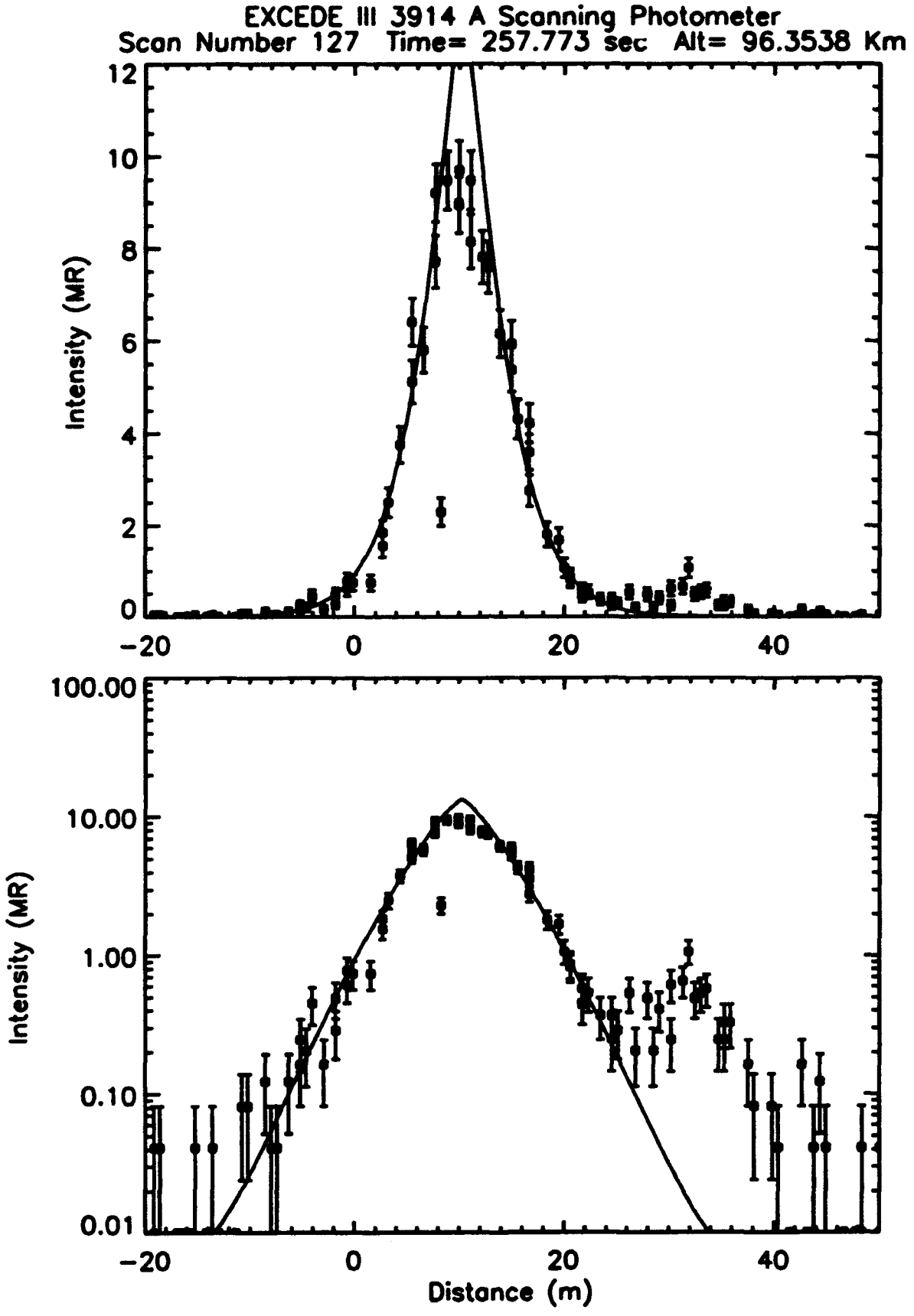

EXCEDE III 3914 A Scanning Photometer
Scan Number 121 Time= 251.886 sec Alt= 99.6872 Km
Intensity (MR)
8
6
4
2
0
-20
0
20
40
Intensity (MR)
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

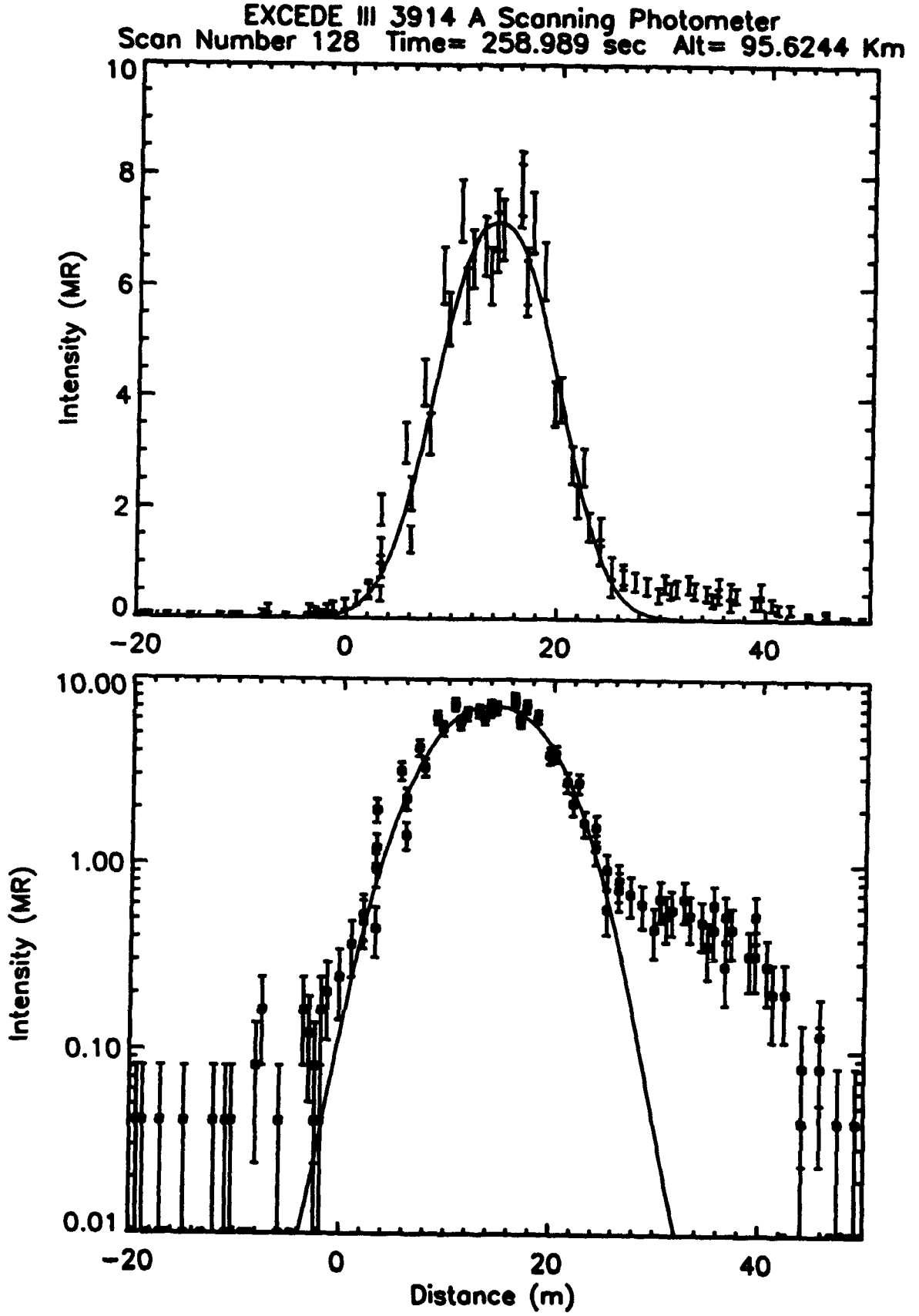

EXCEDE III 3914 A Scanning Photometer
Scan Number 122 Time= 253.027 sec Alt= 99.0666 Km
0.15
0.10
0.05
0.00
Intensity (MR)
-20
0
20
40
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

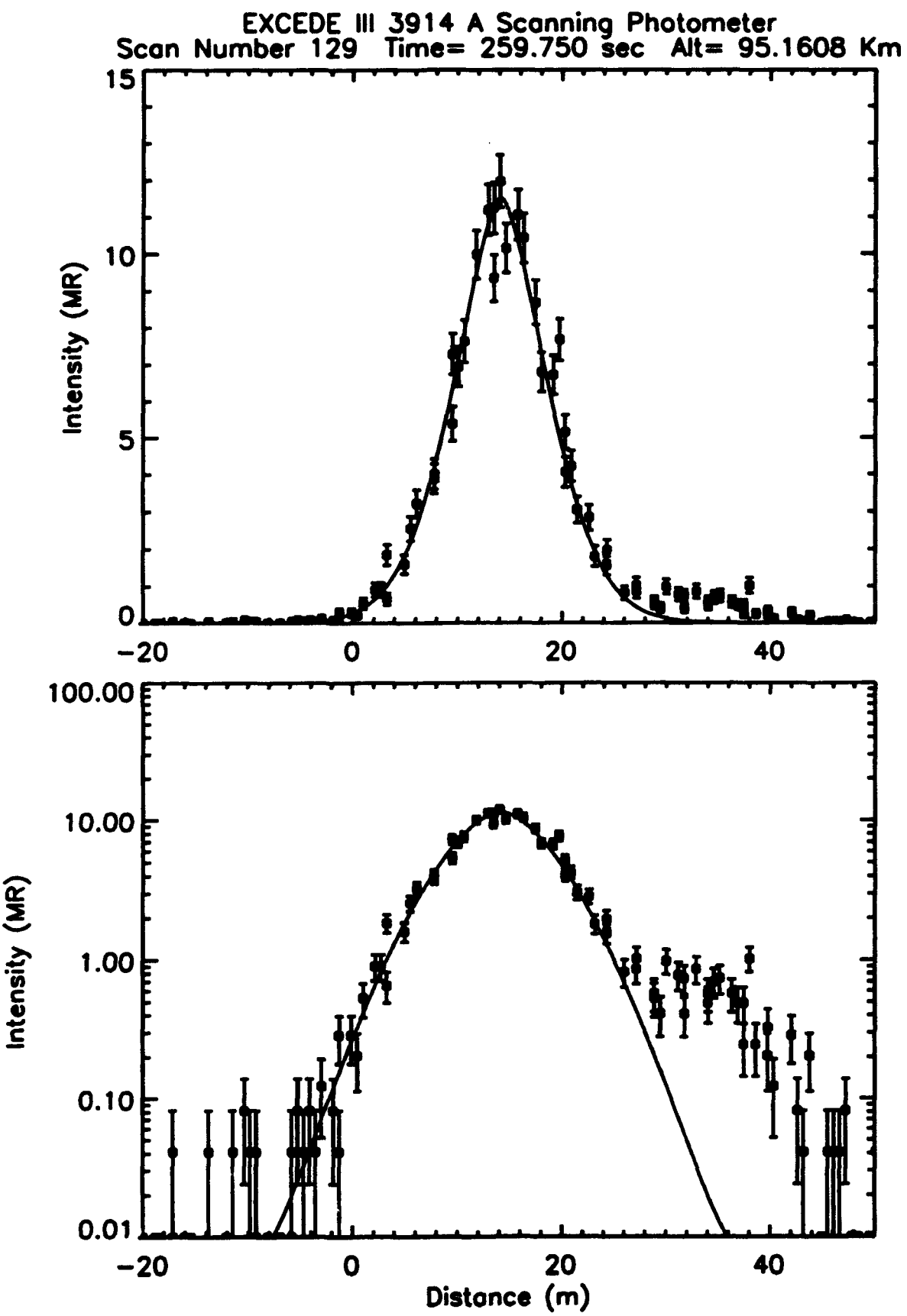

EXCEDE III 3914 A Scanning Photometer
Scan Number 123 Time= 253.988 sec Alt= 98.5346 Km
Intensity (MR)
0.50
0.40
0.30
0.20
0.10
0.00
-20
0
20
40
Intensity (MR)
1.00
0.10
0.01
-20
0
20
40
Distance (m)

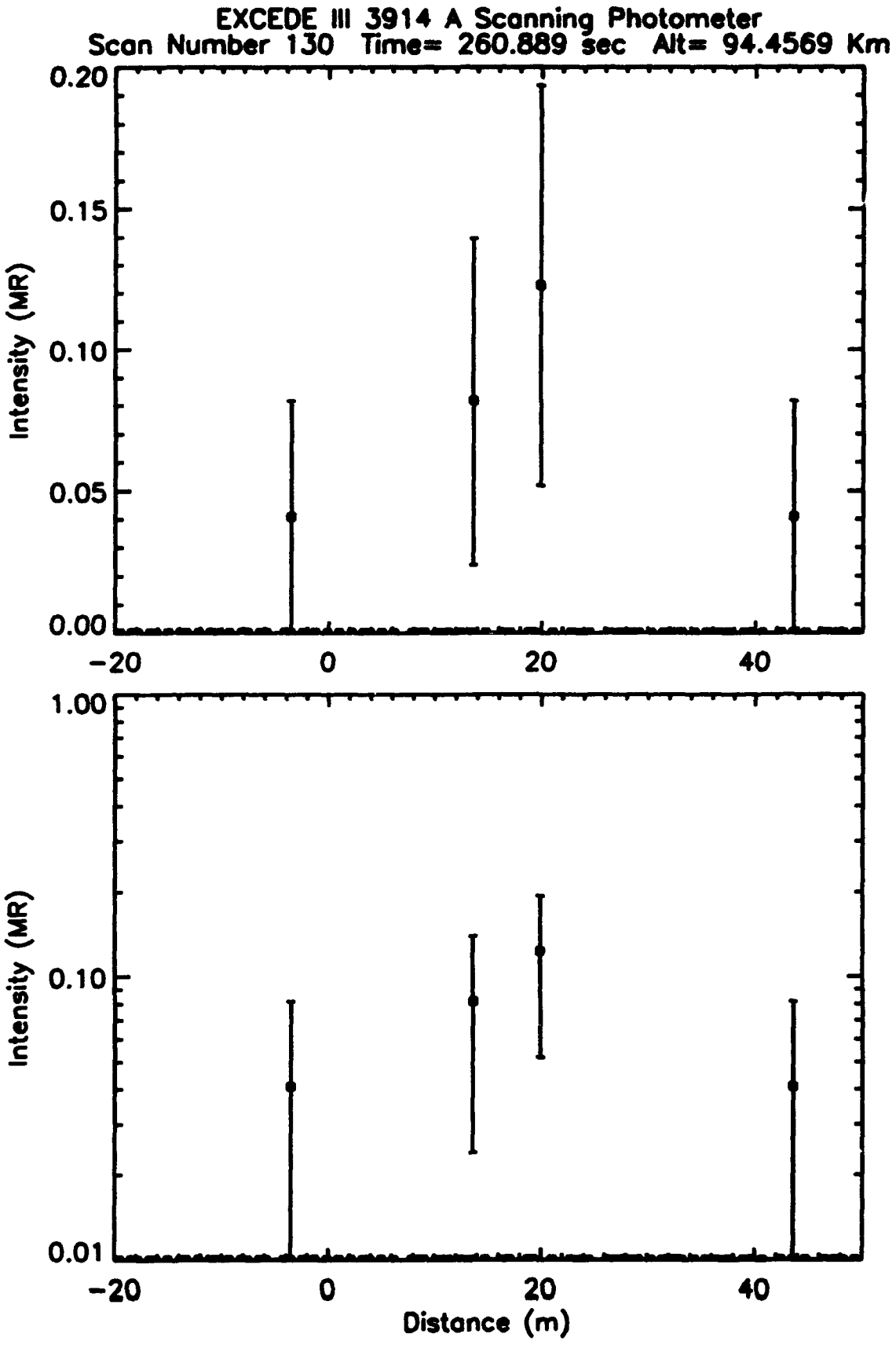

EXCEDE III 3914 A Scanning Photometer
Scan Number 125 Time= 255.809 sec Alt= 97.5023 Km
Intensity (MR)
10
8
6
4
2
0
-20
0
20
40
Intensity (MR)
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

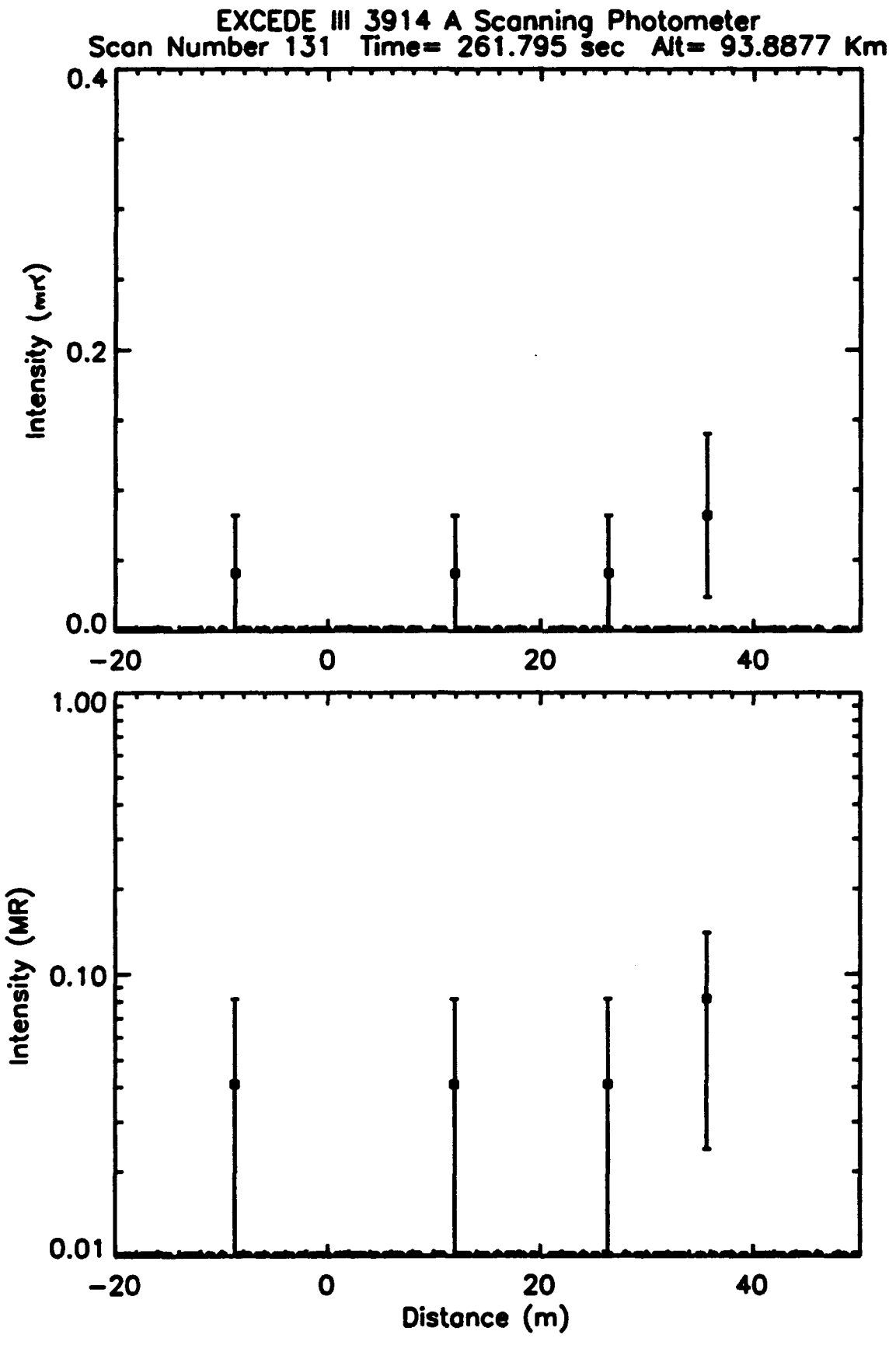

EXCEDE III 3914 A Scanning Photometer
Scan Number 126 Time= 257.046 sec Alt= 96.7832 Km
Intensity (MR)
10
8
6
4
2
0
-20
0
20
40
Intensity (MR)
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

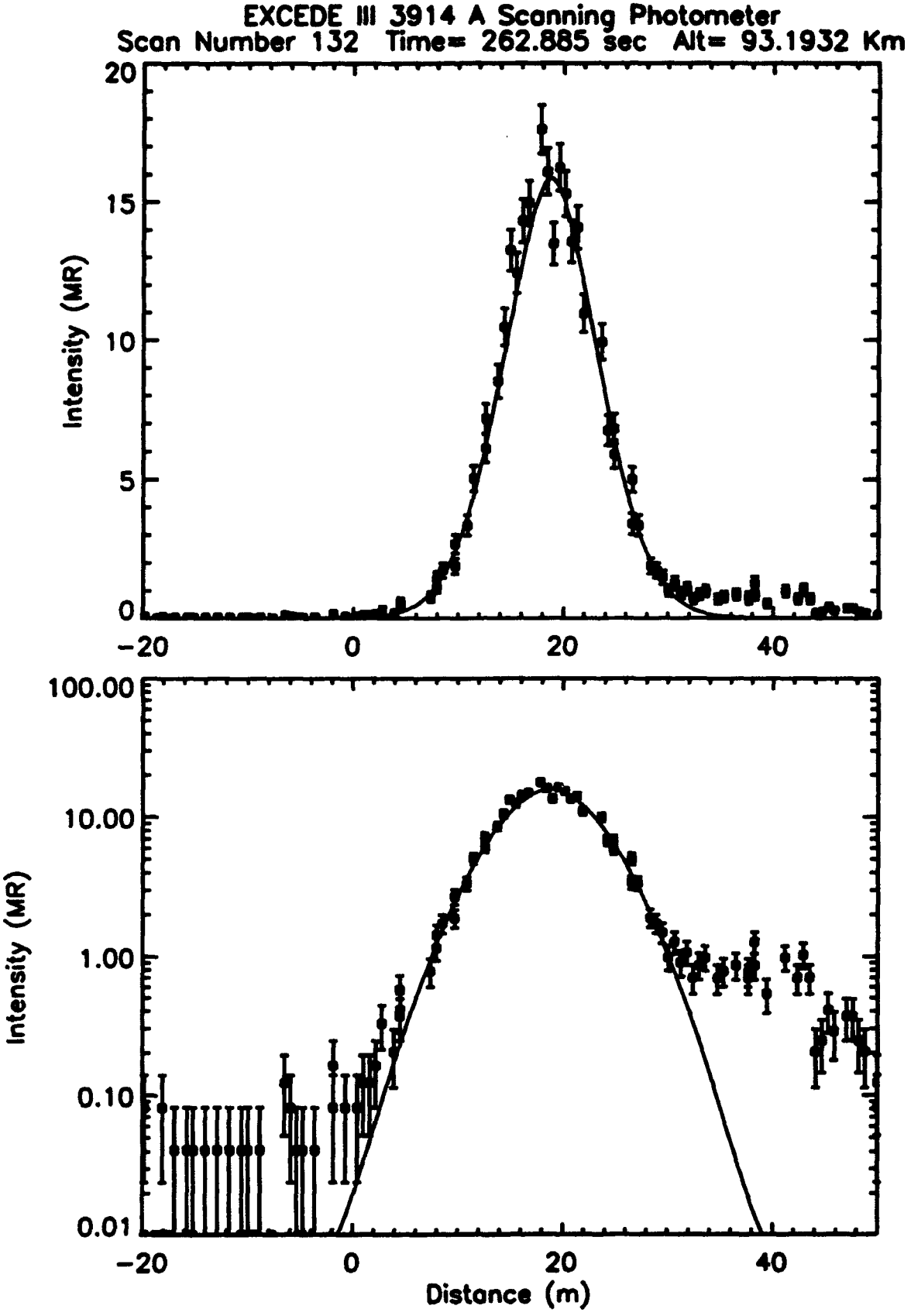

EXCEDE III 3914 A Scanning Photometer
Scan Number 127 Time= 257.773 sec Alt= 96.3538 Km
Intensity (MR)
12
10
8
6
4
2
0
−20
0
20
40
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
−20
0
20
40
Distance (m)

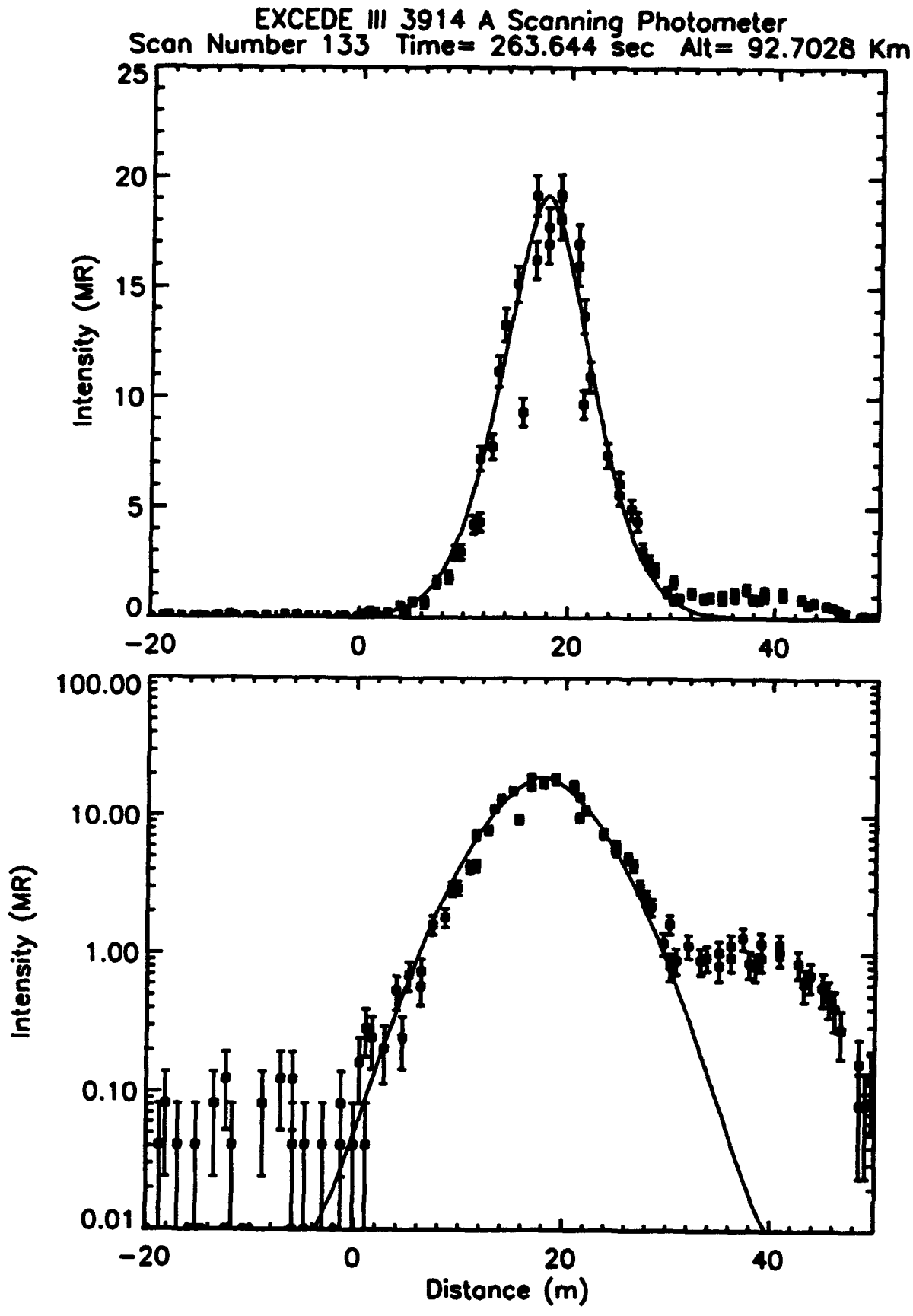

EXCEDE III 3914 A Scanning Photometer
Scan Number 128 Time= 258.989 sec Alt= 95.6244 Km
Intensity (MR)
10
8
6
4
2
0
-20
0
20
40
Intensity (MR)
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

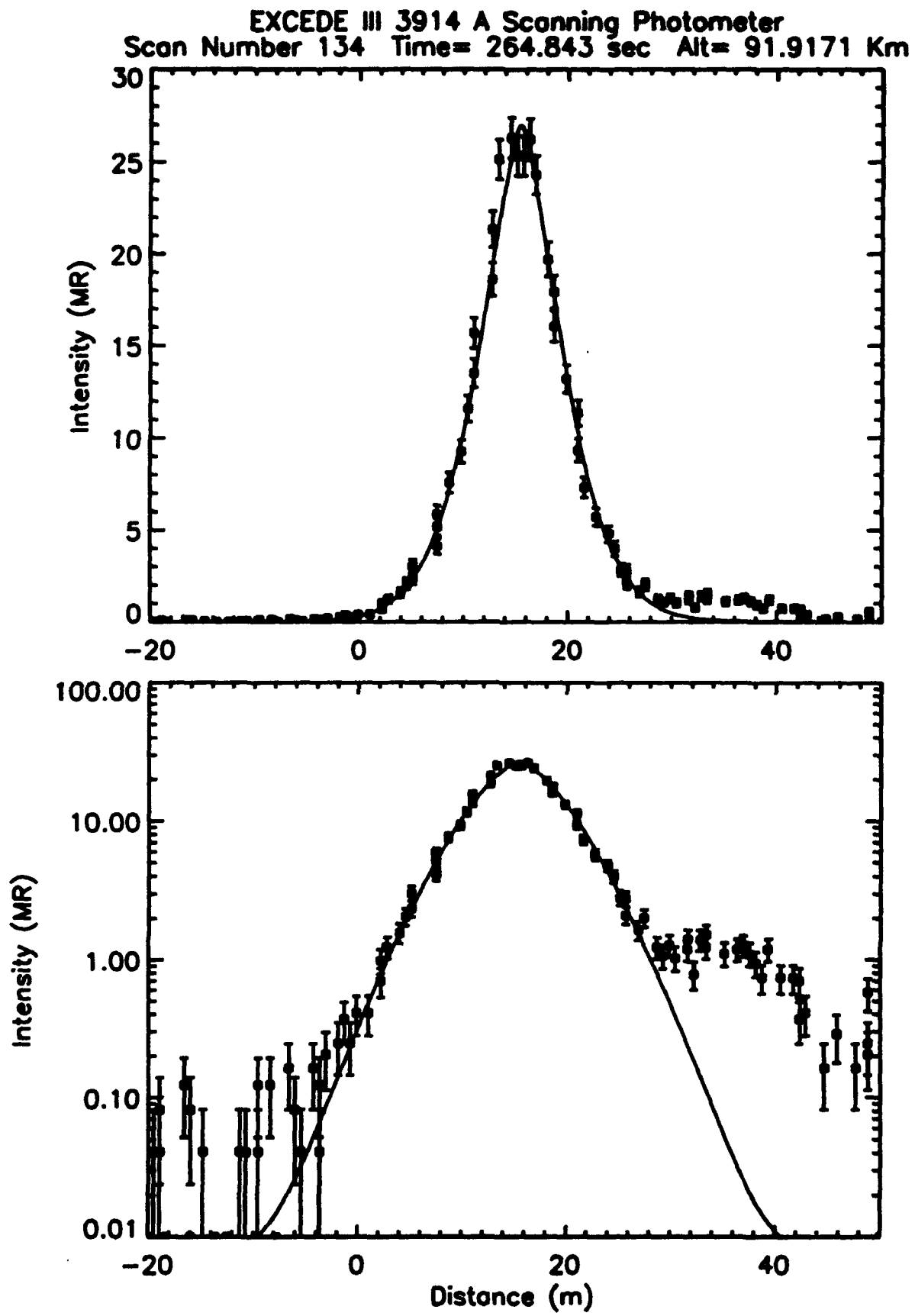

EXCEDE III 3914 A Scanning Photometer
Scan Number 129 Time= 259.750 sec Alt= 95.1608 Km
Intensity (MR)
15
10
5
0
-20
0
20
40
Intensity (MR)
100.00
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)

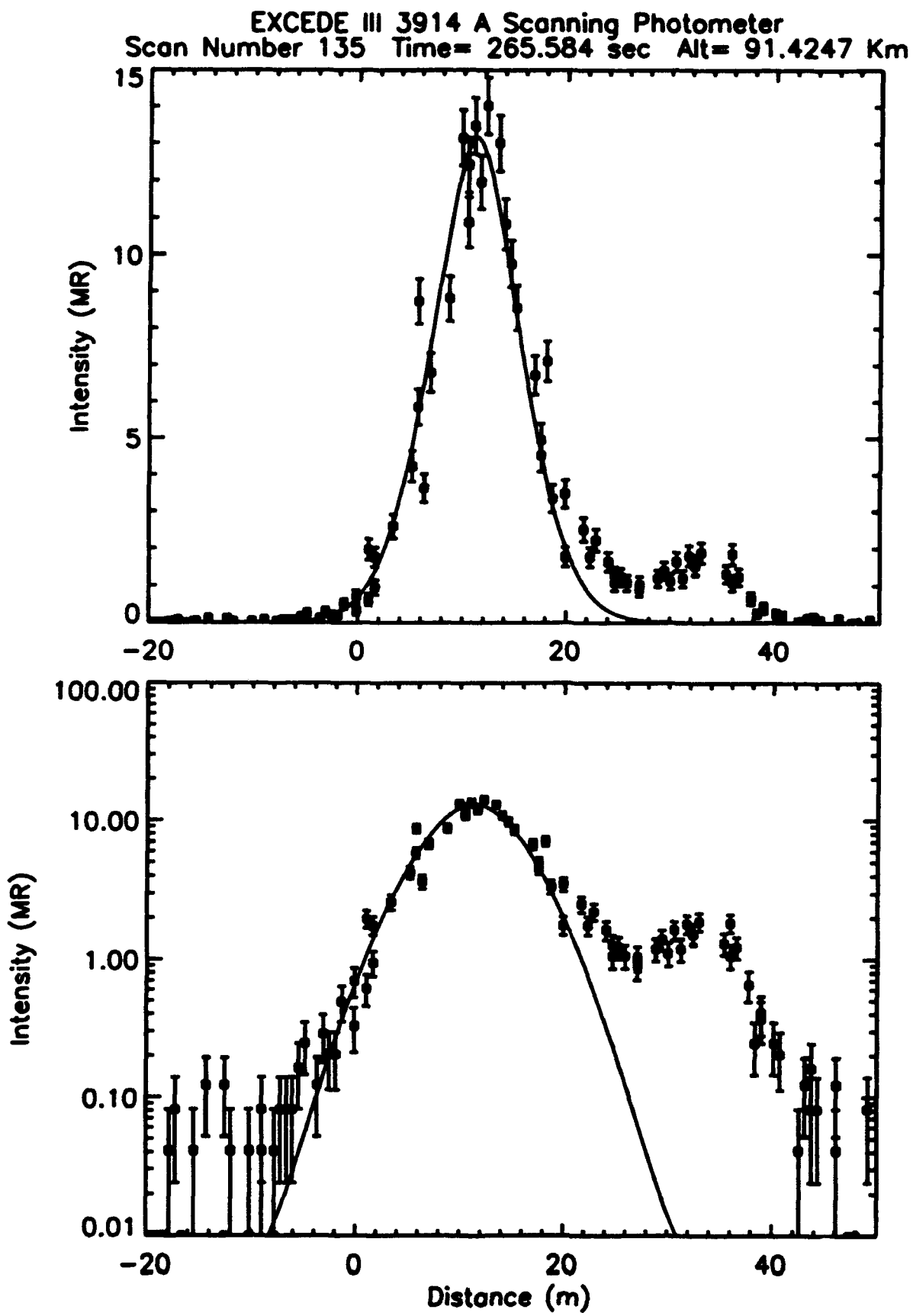

EXCEDE III 3914 A Scanning Photometer
Scan Number 130 Time= 260.889 sec Alt= 94.4569 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
-20
0
20
40
Intensity (MR)
1.00
0.10
0.01
-20
0
20
40
Distance (m)

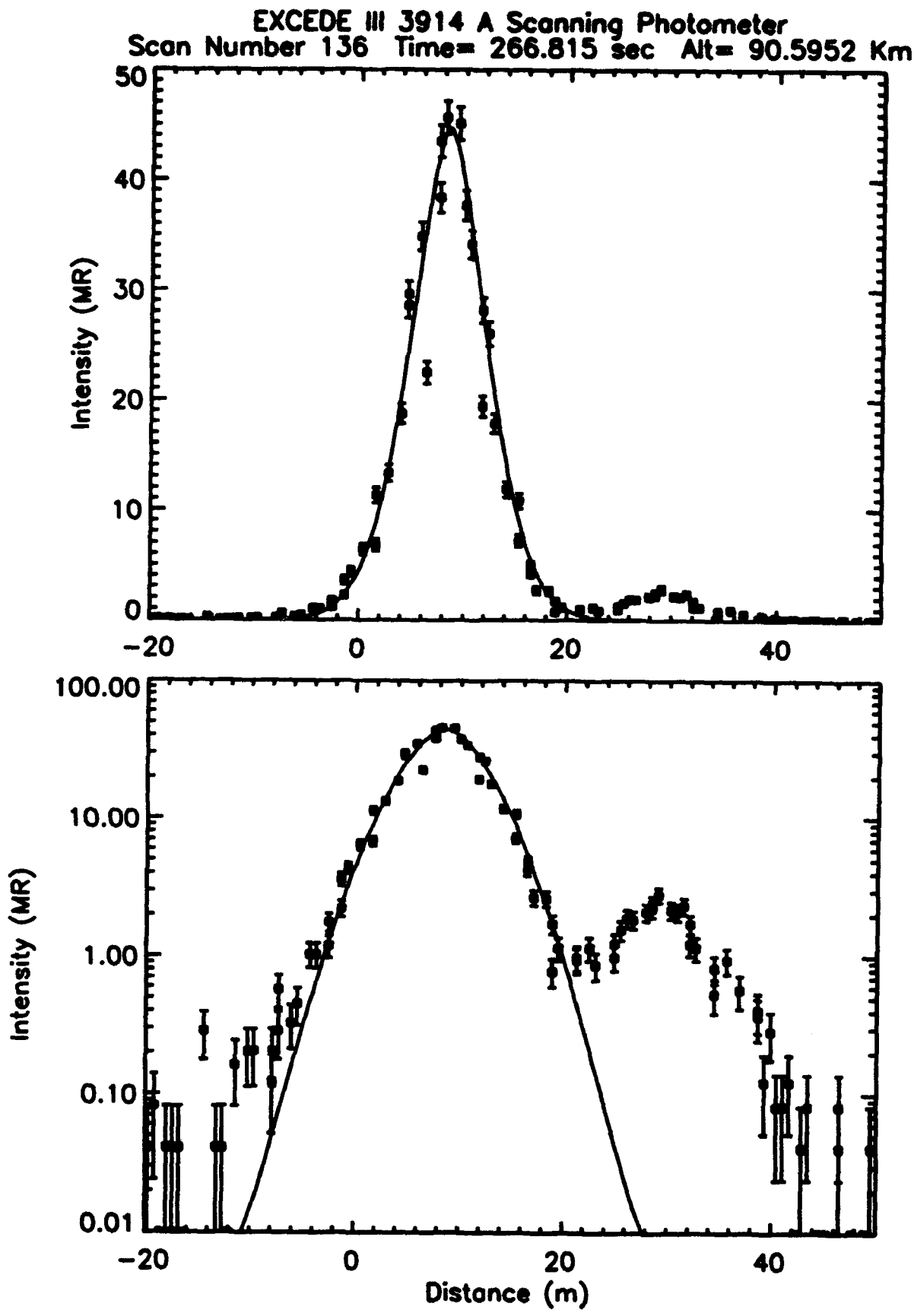

EXCEDE III 3914 A Scanning Photometer
Scan Number 131 Time= 261.795 sec Alt= 93.8877 Km
Intensity (mR)
0.4
0.2
0.0
−20
0
20
40
Intensity (MR)
1.00
0.10
0.01
−20
0
20
40
Distance (m)

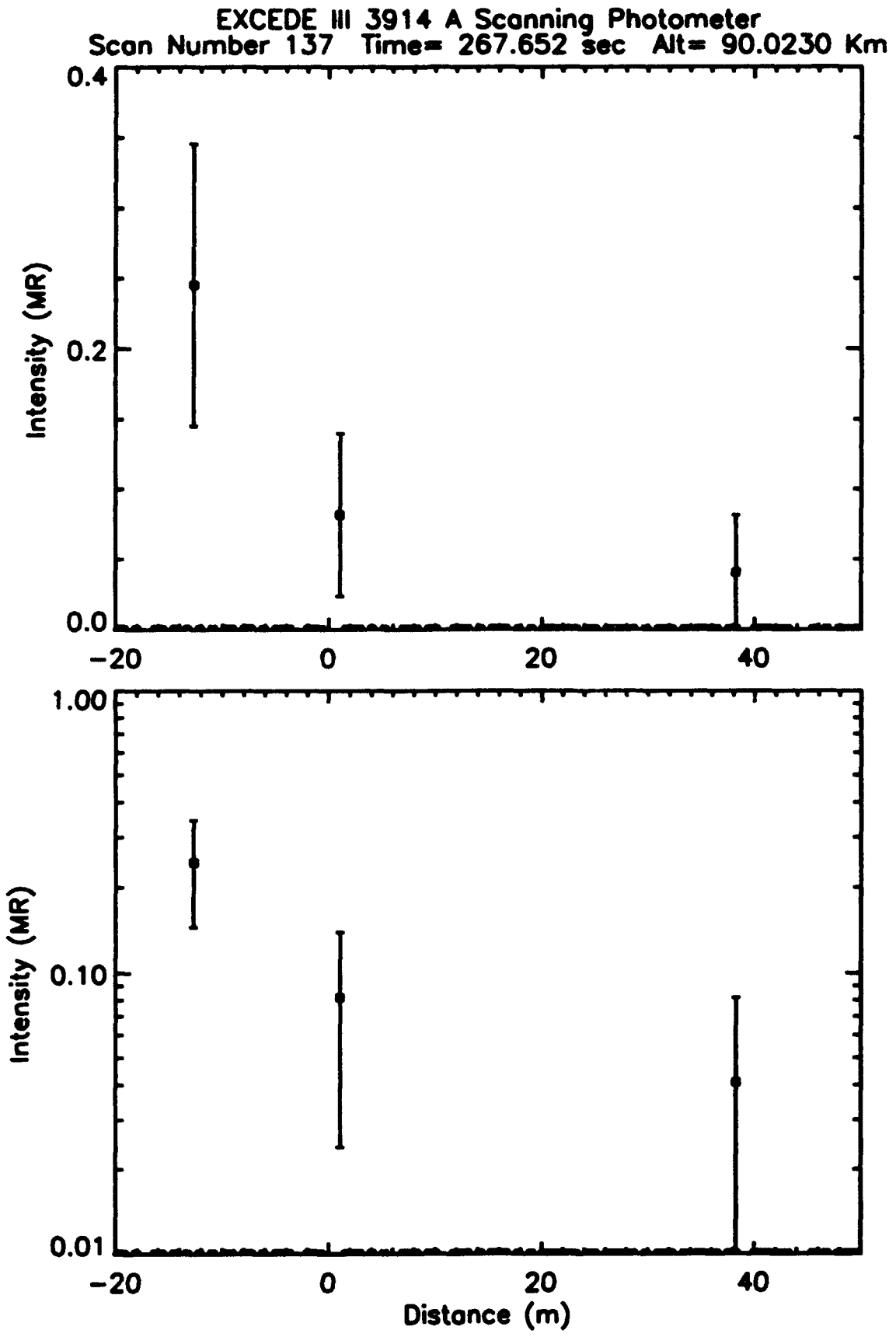

EXCEDE III 3914 A Scanning Photometer
Scan Number 132 Time= 262.885 sec Alt= 93.1932 Km
Intensity (MR)
20
15
10
5
0
-20
0
20
40
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

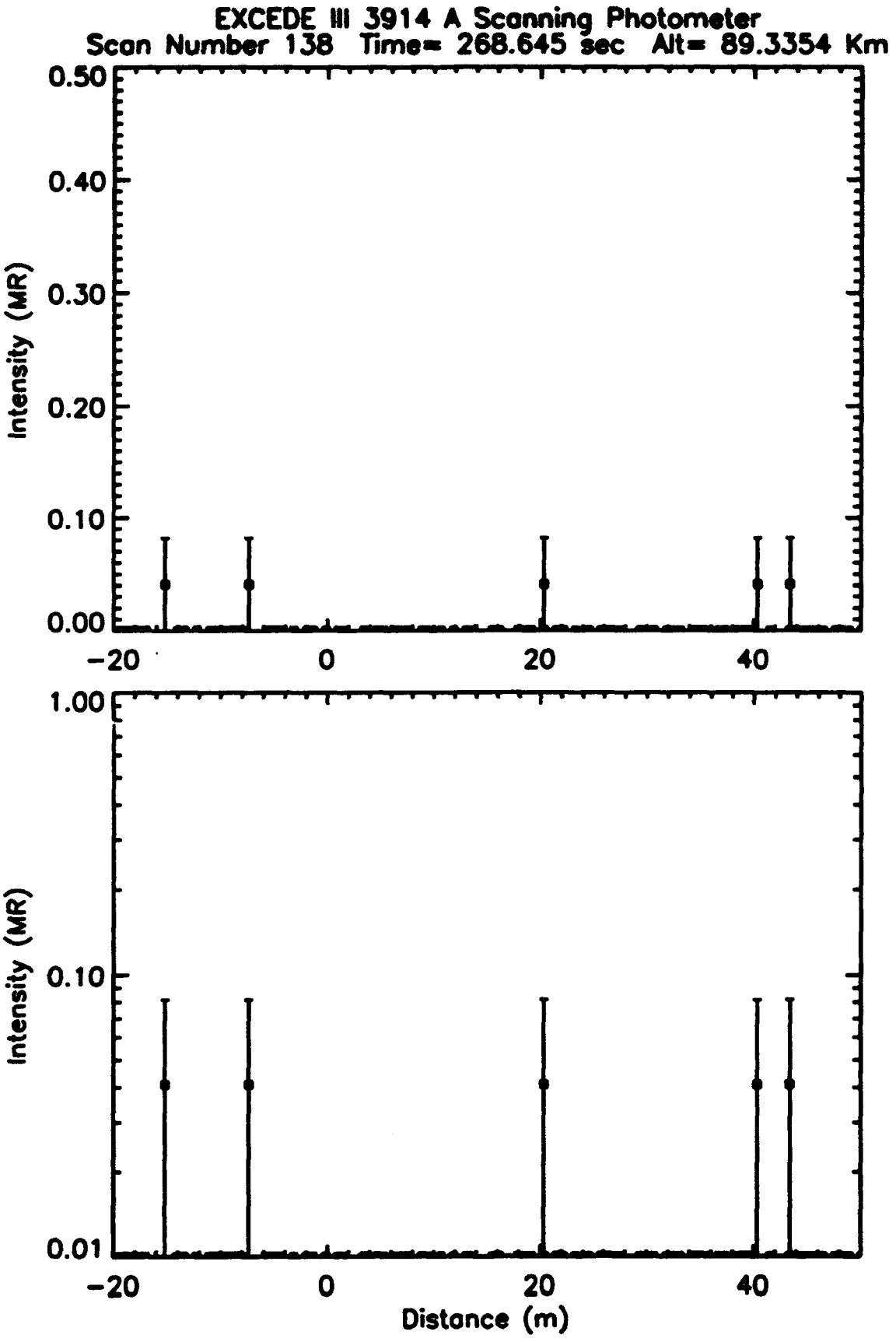

EXCEDE III 3914 A Scanning Photometer
Scan Number 133 Time= 263.644 sec Alt= 92.7028 Km
Intensity (MR)
25
20
15
10
5
0
-20
0
20
40
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

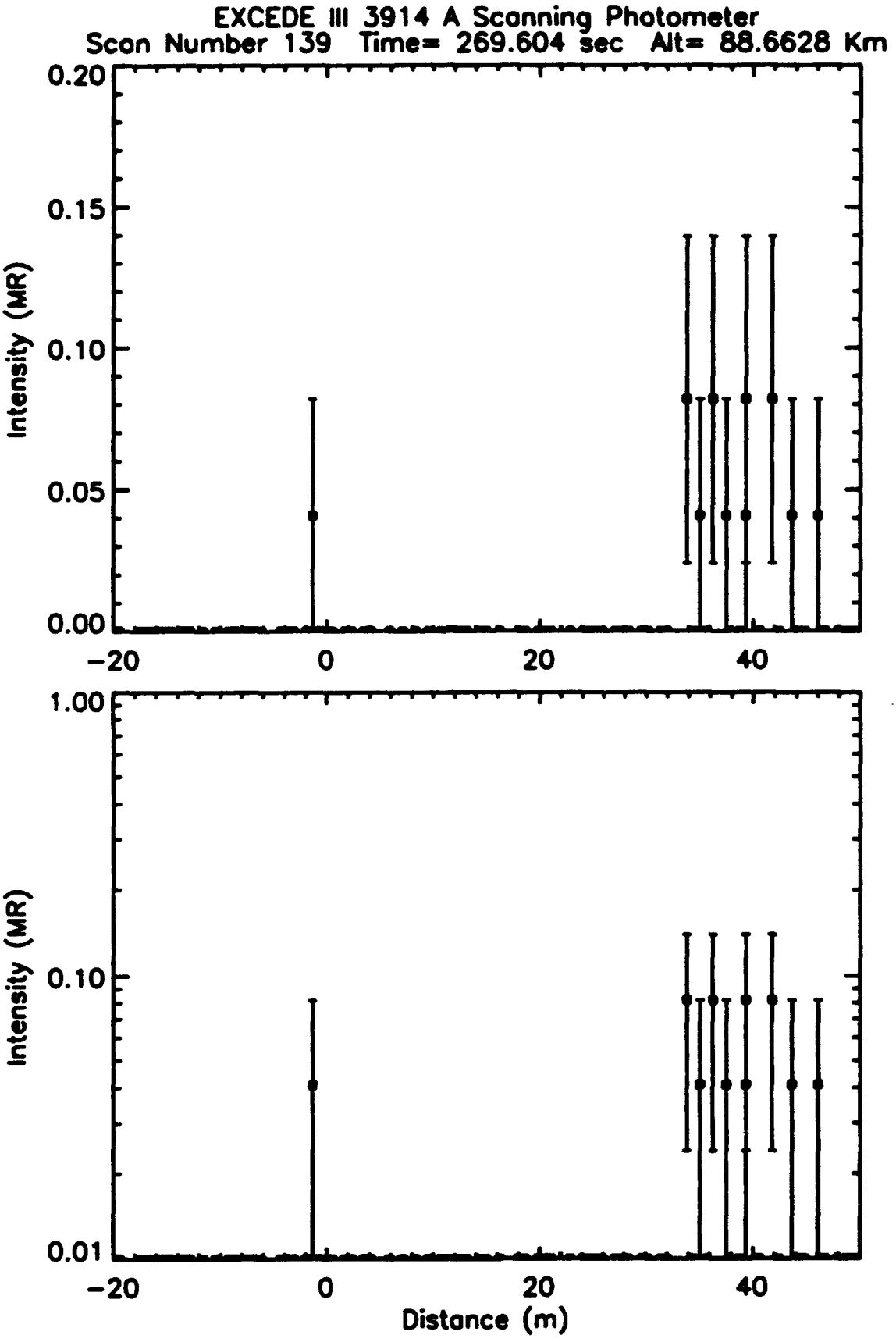

EXCEDE III 3914 A Scanning Photometer
Scan Number 134 Time= 264.843 sec Alt= 91.9171 Km
Intensity (MR)
30
25
20
15
10
5
0
-20
0
20
40
100.00
10.00
1.00
0.10
0.01
Intensity (MR)
-20
0
20
40
Distance (m)

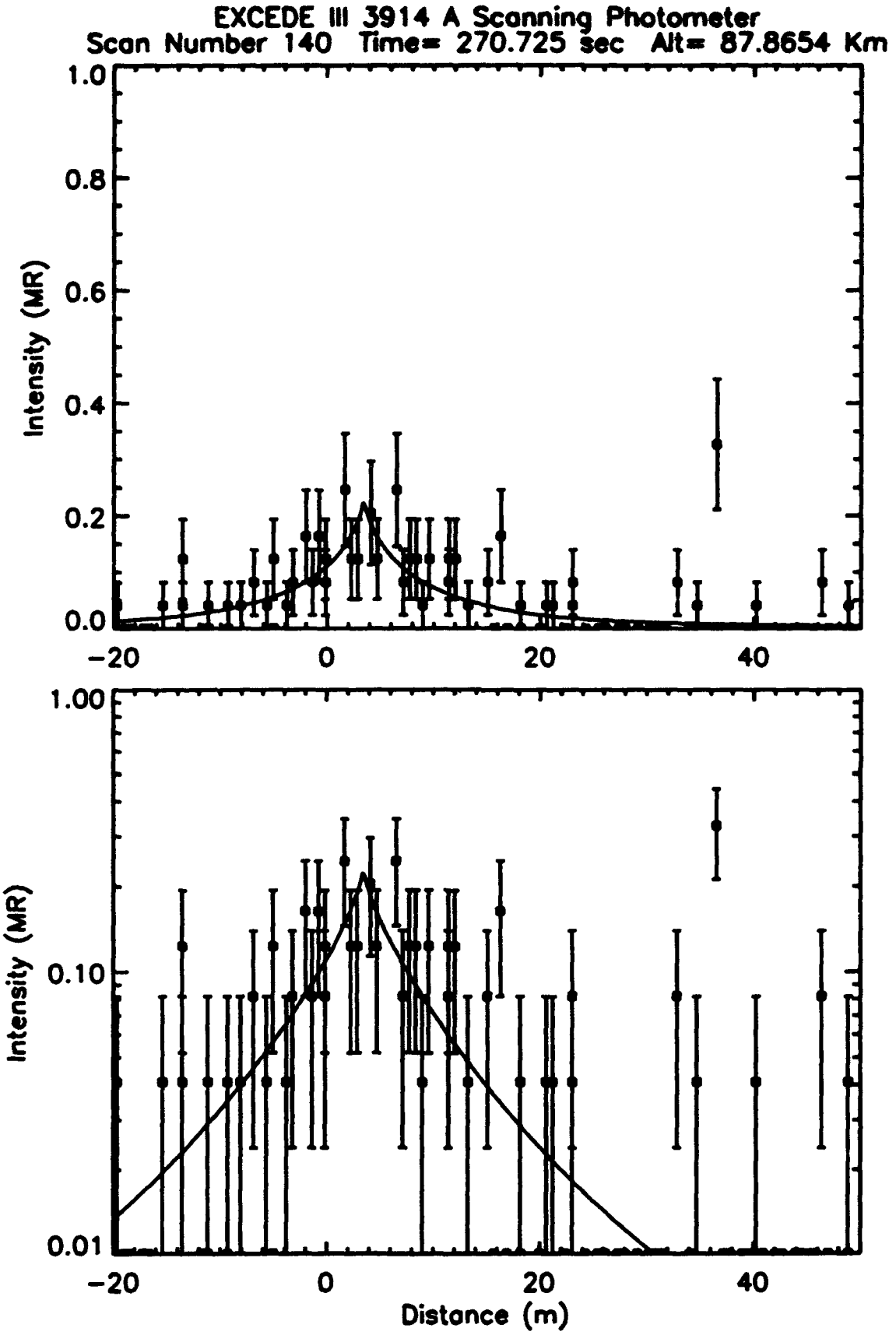

EXCEDE III 3914 A Scanning Photometer
Scan Number 135 Time= 265.584 sec Alt= 91.4247 Km
Intensity (MR)
15
10
5
0
-20
0
20
40
Intensity (MR)
100.00
10.00
1.00
0.10
0.01
-20
0
20
40
Distance (m)


EXCEDE III 3914 A Scanning Photometer
Scan Number 136 Time= 266.815 sec Alt= 90.5952 Km
Intensity (MR)
50
40
30
20
10
0
-20
0
20
40
100.00
10.00
1.00
0.10
0.01
Distance (m)


EXCEDE III 3914 A Scanning Photometer
Scan Number 137 Time= 267.652 sec Alt= 90.0230 Km
Intensity (MR)
0.4
0.2
0.0
-20
0
20
40
Intensity (MR)
1.00
0.10
0.01
-20
0
20
40
Distance (m)


EXCEDE III 3914 A Scanning Photometer
Scan Number 138 Time= 268.645 sec Alt= 89.3354 Km
Intensity (MR)
0.50
0.40
0.30
0.20
0.10
0.00
−20
0
20
40
Intensity (MR)
1.00
0.10
0.01
−20
0
20
40
Distance (m)


EXCEDE III 3914 A Scanning Photometer
Scan Number 139 Time= 269.604 sec Alt= 88.6628 Km
Intensity (MR)
0.20
0.15
0.10
0.05
0.00
−20
0
20
40
Intensity (MR)
1.00
0.10
0.01
−20
0
20
40
Distance (m)


EXCEDE III 3914 A Scanning Photometer
Scan Number 140 Time= 270.725 sec Alt= 87.8654 Km
Intensity (MR)
1.0
0.8
0.6
0.4
0.2
0.0
−20
0
20
40
Intensity (MR)
1.00
0.10
0.01
−20
0
20
40
Distance (m)